REPORT RESUMES

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RETARDED YOUTH--THEIR SCHOOL-REHABILITATION NEEDS. FINAL REPORT.

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A 4-YEAR REHABILITATION PROJECT, DEVELOPED TO INVESTIGATE MEANS OF ALLEVIATING DEFICIENCIES IN SCHOOL-REHABILITATION SERVICES, IS DESCRIBED. THROUGH A SERIES OF RESEARCH REPORTS AND DEMONSTRATION PROJECTS THIS STUDY EVALUATED PROGRAMS PREPARING ADOLESCENT MENTALLY RETARDED FOR EMPLOYMENT, AND AT THE SAME TIME FACILITATING COORDINATION OF COMMUNITY SERVICES AND OFFERING BASIC INFORMATION AND TECHNIQUES. SUBSTUDIES PROVIDE A DESCRIPTION OF THE POPULATION SERVED THROUGH THE PROJECT. FOLLOWUP DATA ON FORMER SPECIAL CLASS STUDENTS PROVIDES INFORMATION ABOUT WORK HISTORIES, HEALTH, SEX, RACE, AND THE USE OF VOCATIONAL AND REHABILITATION SERVICES BY THOSE CLIENTS. IN ADDITION TO THE DATA REGARDING CHARACTERISTICS, PROBLEMS, AND POTENTIAL OF THE POPULATION SERVED, DESCRIPTIONS OF THE TRAINING AND GUIDANCE PROGRAMS ARE PROVIDED. IMPLICATIONS IN TERMS OF DIAGNOSIS, ADEQUACY OF EXISTING FACILITIES, ATTAINABLE GOALS, AND THE CURRICULUM ARE REPORTED. (JW)

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Retarded Youth:
Their School-Rehabilitation Needs

RESEARCH AND DEMONSTRATION PROJECT 681
SPONSORED BY
Minneapolis Public Schools.
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U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
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RETARDED YOUTH: THEIR SCHOOL-REHABILITATION NEEDS

Final Report of Project RD-681

A study and demonstration of means of realizing vocational rehabilitation goals through special occupational training services for high school age educable retarded youth.

Period covered: September, 1960 through August, 1964

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FOREWORD

One of the problems as well as one of the strengths of institutions in the public domain is their resistance to change. Procedures and practices created to solve problems existing at the point of their birth can easily develop functional autonomy. The means of realization become reified to the point that the rituals of implementation come to be viewed as "the way" or the end in itself. Members of an institution's organizational structure can become so accustomed to doing things or seeing their roles in a certain way that suggestions of departure therefrom can represent the same kind of threat to individual security that a hand-washing neurotic experiences when fulfillment of his anxiety-easing ritual is blocked.

At the same time, change and new ideas are not meritorious simply because they are new or different. Many solid and dependable "birthrights" have been too hastily tossed aside for "messes of pottage" which happened to fit into the fad-like mood of the times, or were deductions from findings or theory which later proved to be built upon erroneous or incomplete assumptions.

As in any realm of administrative decision, the greatest difficulty in service to the handicapped or disadvantaged is being able to discern and define the nubs or the roots of problems and then devising ways to relieve them which will endure in the long pull after the first blush of newness-engendered enthusiasm has been dulled and honed by a fuller appreciation of the problem's complexities and its resistance to cure for all time. Justifiably, the intelligent, thoughtful protector of what has endured asks for evidence that the change in practice he is being asked to accept really does represent improvement over past methods. That question needs to be asked and answered to the point of reasonable assurance that a better working premise has been found before major or basically significant changes are made in an institution's organization or practices.

The mechanism of research and demonstration is a tool for achieving better problem definition and providing opportunity for trying out various means of problem relief which we have some reason to believe may work. Accordingly, in 1960, the Minneapolis Schools with encouragement of the Minnesota Division of Vocational Rehabilitation made application to the Vocational Rehabilitation Administration for funds to assist in conduct of a research and demonstration project "To Study and Demonstrate Special Occupational Training Services for Educable Retarded Youth." Application granted, this study became VRA Research and Demonstration Project 681. This report is a summary of the activities carried out under this grant.

Our experiences in conduct of this project have convinced us so completely of the merits of the research and demonstration approach to growth and change in the rapidly expanding fields of special education and rehabilitation that we feel such work should be henceforth an integral, on-going part of our special education-rehabilitation program.

The disability characteristics of disadvantaged populations change rapidly and unpredictably as medical practices change. What constitutes a handicap changes as the characteristics of the environment change. Our social order, means of production and economic conditions are changing with a speed almost beyond comprehension. Special education and rehabilitation people will need to perceive themselves, organize their work and conduct their programs with appreciation that they are adaptive and adaptable mechanisms, not a solution which can take on a fixed or permanent form. These are fields whose orientation must be toward adaptability, flexibility and innovation flowing from tested premises, not from tradition, and programs must be tooled and staffed to run from this basic set.

We are pleased that our effort to implement this point of view has been regarded with sufficient favor to bring the honor of selection by Vocational Rehabilitation Administration as a prototype operation. We feel privileged to have been able to serve as an object of observation to the many professionals who have visited us to see what was going on and how things were being done.

But by the very fact of our angle of regard, it follows that we believe that people should not come to observe with the idea that any way of operating can be taken over and applied uncritically to a situation which is different in significant respects from the one within which the modus operandi indigenously evolved. We are further concerned that observers understand that the way they see us today will not be the way we hope to be operating tomorrow, for if it is, either change is not as rapid and challenging as we have conceived it to be or we, too, have allowed ourselves the defeating luxury of believing that we have discovered "the way" and are failing in our problem-solving objective of constant evaluation to meet changing needs in changing times. From our point of view, the final report of Project 681 can never be written.

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Special acknowledgement is given to Mr. James Treglawny, Principal of Central High School. His administrative facilitation and real interest in the project contributed significantly to its development.

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PART I: INTRODUCTION AND DEVELOPMENT OF THE PROJECT

Chapter 1

PURPOSES OF THE PROJECT

The public schools of Minnesota have been given a mandate to provide appropriate educational service for all educable mentally retarded children. The Division of Vocational Rehabilitation must be concerned about retarded youth as they approach employable age. These assignments of responsibility reflect public intent to make the satisfactions of living accessible to all society's members, including the less fortunately endowed.

Educational planning proceeds from a set of assumptions about the nature of the learner, the character of the learning process, the needs of society and the school system's place in the pattern of services to be provided through public agencies. Vocational rehabilitation proceeds from similar considerations regarding the relation between client and environment characteristics in the work which that agency advances.

Free public education for all children was an aspiration articulated at the beginnings of this country's history. After nearly 200 years of public education the ambition to reach all children is as yet imperfectly realized, though coverage grows rapidly more complete.

Vocational rehabilitation began as a concept of re-education for employment of persons who had been disabled by disease or accident. Vocational rehabilitation is largely a twentieth century development which has grown as its successes have documented the merits of its stated objectives.

The ways of working initially developed were necessarily conditioned by the characteristics of the clientele then being served. Until the 1943 Vocational Rehabilitation Amendments, service was limited to the physically handicapped. Practices developed to serve the predominant needs of these initial clients still remain as the service paradigm which dominates the image of the Vocational Rehabilitation Agency's function in the minds of many.

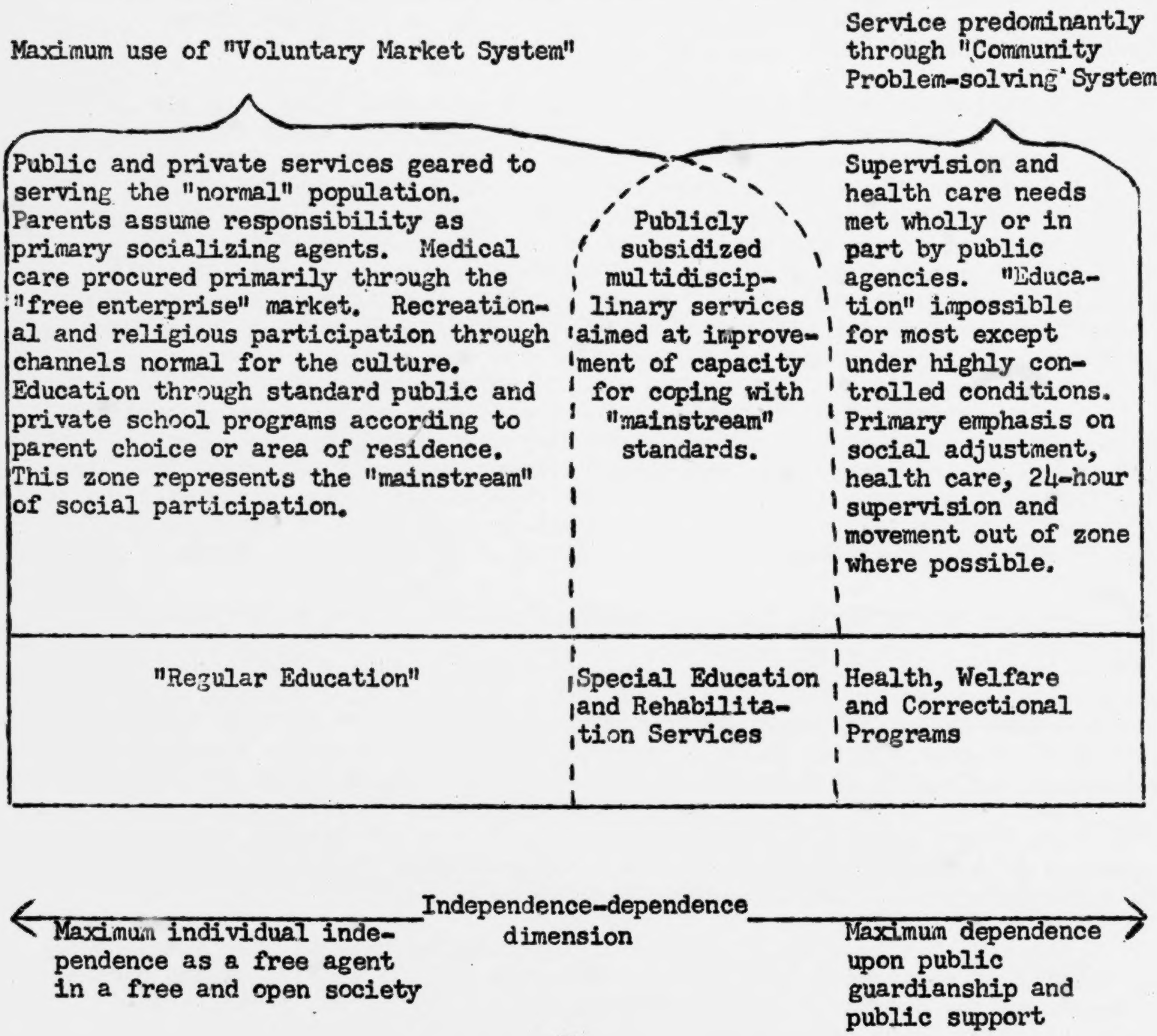
As education extended its outreach to include handicapped children in its day school programs, new dimensions were added to the range of services to children provided through the channel of the public schools. Services were organized according to the ideas of the times and the degree of disability regarded as educable within a public day school framework. Notions of homogeneity of need among children sharing common categorical labels led to excessive reliance upon special class as the service module. By tradition, special education and special class became practically synonomous terms in the general view, just as the predetermined sequences prescribed for the rehabilitation counselor's work began to stand for what vocational rehabilitation service was. Both special education and vocational rehabilitation find themselves in need of new service modules better suited to today's problems, today's clients, and today's technologies.

As special education has reached out to serve more severely handicapped children and the proportions of adventitiously handicapped children in the handicapped population declined due to medical advances in control of diseases, vocational rehabilitation has found itself confronted with urgent demand to serve more difficult cases such as the mentally retarded and mentally ill. Parents and public are concerned about how these people are going to move into the life of the community once their age takes them beyond the relatively planned and supervised life of school attendance and the parental protection accorded growing children.

Special education and vocational rehabilitation share common cause in their charge to help dependency-vulnerable people achieve as high a degree of independence as they are realistically able to attain in the particular cultural milieu in which the disadvantaged person must try to do his coping. Since Project 681 was conceived, other types of disadvantaged persons have come to be viewed as handicapped by factors beyond their power to surmount without aid. Other habilitative or door-opening programs have joined the realm of independence-promoting services supported through public efforts. Programs directed to overcoming the function-depressing effects of experience deprivation due to poverty or cultural alienation, programs to prevent school dropout and delinquency, programs to diminish selective service rejection rates, programs to retrain workers whose skills no longer have market value, and programs to habilitate persons handicapped by accident, disease, heredity, or developmental anomaly are all tines of the same fork fashioned for the basic purpose of helping people to achieve greater self-sufficiency and fuller participation in the satisfactions the society provides. The place of special education and rehabilitation in the continuum of public services devoted to independence promotion is illustrated in Figure 1.

Figure 1

The Place of Special Education and Vocational Rehabilitation Services in the Continuum of Independence-Promoting Services



Maximum use of "Voluntary Market System"

Service predominantly through "Community Problem-solving Systems"

Public and private services geared to serving the "normal" population. Parents assume responsibility as primary socializing agents. Medical care procured primarily through the "free enterprise" market. Recreational and religious participation through channels normal for the culture. Education through standard public and private school programs according to parent choice or area of residence. This zone represents the "mainstream" of social participation.	Publicly subsidized multidisciplinary services aimed at improvement of capacity for coping with "mainstream" standards.	Supervision and health care needs met wholly or in part by public agencies. "Education" impossible for most except under highly controlled conditions. Primary emphasis on social adjustment, health care, 24-hour supervision and movement out of zone where possible.
"Regular Education"	Special Education and Rehabilitation Services	Health, Welfare and Correctional Programs

Independence-dependence dimension

Maximum individual independence as a free agent in a free and open society

Maximum dependence upon public guardianship and public support

These salvaging activities are carried on under different auspices and in different ways in different communities. The character of special education and rehabilitation services has to be shaped to the circumstances which prevail in the particular setting. The character of the service will be conditioned by whether it operates on "voluntary market" or "community problem-solving" premises. (See Chapter 2 for further explication of these terms.) As more kinds of services develop under more administrative jurisdictions, the necessity becomes more urgent for planned coordination to hold down costly duplication and defeat of purposes through client agency shopping to find one that agrees with his view of his problem.

Educational programs have traditionally been devoted to enhancing broad aspects of individual functioning. Though the market value of education has not gone unrecognized, education has not felt compelled to justify its existence on the basis of its economic utility to the extent that vocational rehabilitation apparently has.

Education is rather universally accepted as a good thing. In our country, this is carried to the point of its being viewed as an individual right. Though education may be sold to the individual and the supporting public by figures which demonstrate the dollar value of education, it is usually on the basis of the increased income enjoyed by the better educated individual, not on the basis of the individual's greater monetary return to the state. In fact, the American ethos tends to reject any notion that the individual exists for the state. We contend that the individual has a right to self-realization for reasons of his own becoming, and it is on these same grounds that special education is justified and supported.

This quality in service orientation combined with the public school's lack of right to be selective in the clientele it serves and the client's lack of right to refuse to attend school differs in significant ways from the frame of reference in which vocational rehabilitation has historically operated. Though that agency's goal has always been to be of service, it has from its very beginnings had to prove itself on an economic basis.

In its arguments for public support, vocational rehabilitation has pointed to the tax returns gained by rendering employable, through rehabilitation service, persons who would have been tax consumers without such intervention. Vocational rehabilitation has been under no legal mandate to serve all who were handicapped and might wish help. Pressure to justify cost on economic grounds tends to place a heavy premium on the client's likelihood of achieving employable status, and so the concept of "feasibility" for service has entered as a determinant of whether a client will be selected for service. This bias toward selection of the most likely-to-achieve clients is further enhanced if a rehabilitation counselor's efficiency is judged by the number of clients he serves and the number of cases he closes as "rehabilitated."

These qualities of (1) selectivity in client acceptance, (2) judgment of service effectiveness on grounds of monetary profit, and (3) client participation in the program on a voluntary basis, put vocational rehabilitation in a different frame of reference from the special education programs operated under public school auspices to which it closely relates. These disjunctions in client selection and service orientation make for gaps in service coverage and continuity. The same clearly handicapped youth may be eligible for school service but rejected as ineligible for vocational rehabilitation service on the grounds of a rehabilitation counselor's opinion that he is "unfeasible." This causes considerable discomfort and confusion among clients, their families, and the public left with a social problem unresolved.

Project 681 was designed to explore for a mode of operating which would alleviate certain obvious and significant deficiencies in traditional school-rehabilitation functioning, including:

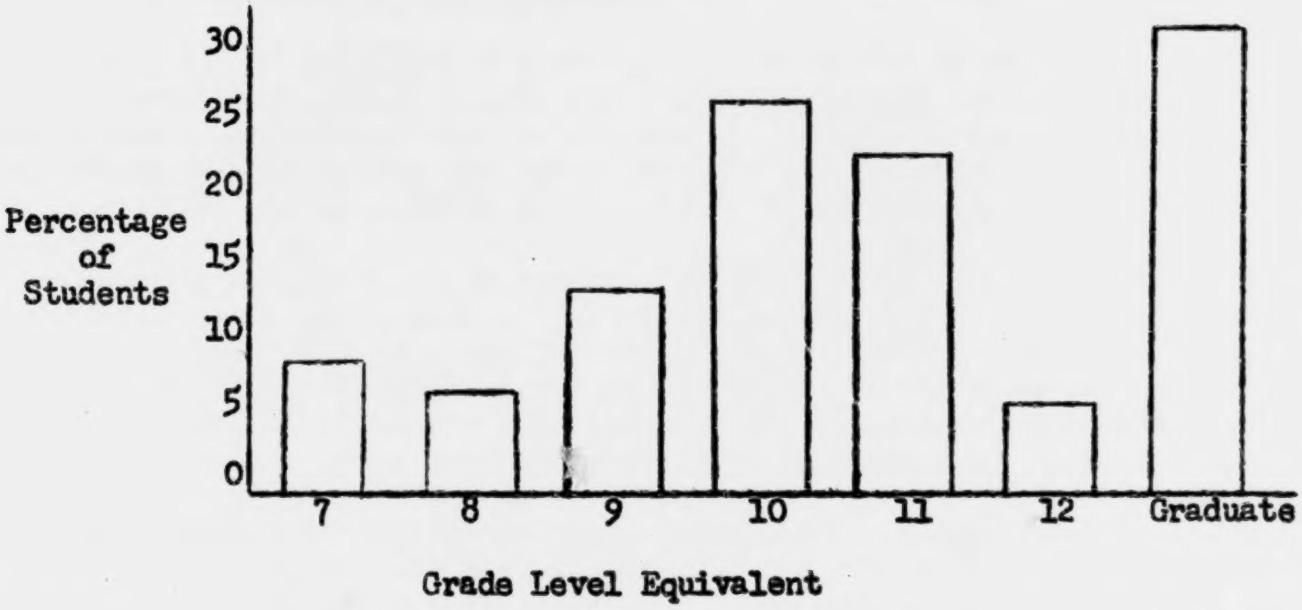
1. The problem that conventional ways of proceeding rested heavily on the assumption that the client, or his guardian, would recognize what was best for him and would take the steps necessary to secure aid. (Our data will show that the majority of students enrolled in special education programs did not receive vocational rehabilitation agency service.)

2. The problem that keying of rehabilitation service to the end of the high school period would tend to miss the majority of the retarded. Figure 2 below indicates that two-thirds of the retarded had dropped out of school before reaching that point.

Figure 2

Grade Level at Which Minneapolis Students Left Educable Retarded Classes

from September, 1957 to July, 1960 N=409



A vocational rehabilitation program focused on working with students from a twelfth grade level would obviously bypass a majority of the retarded students. If vocational rehabilitation service were limited to the senior high schools, over one-fifth of the retarded would already have been gone before the possibility of this service entered their lives.

3. The problem that under the practice of service implementation through the medium of conceiving the rehabilitation counselor as

middle man, service was always limited by what services were available for purchase. While the counselor might act as promoter to encourage some other agency to set up a service, this is usually a slow, time-consuming process which may take too long to be of much use to the client at the time of his optimum readiness for help.

4. The problem that not all clients needing help in life planning can be made employable in relatively short periods of time or by one agency working alone. Habilitation of the severely handicapped is not an objective which any one agency can expect to achieve by itself. To serve as a viable and useful public tool, vocational rehabilitation practices need to interlock effectively with the total continuum of assistance provided through various agencies. It has to find its position in the total spectrum of service resources for the handicapped. It must also be in position to maintain help and surveillance for long enough periods of time to accommodate to the slow rate of gain to be expected of the more severely disabled.

5. The problem that our particular community had no central reference point where all agencies could clear to find out what had transpired with a particular retardate and what was planned for him in the future. Though the public schools have a census responsibility, this mechanism had not been explored to its full potential.

Project 681 proposed to test possibilities of using the mechanism and facilitations of the public school operation to bring more suitable habilitation service to more handicapped, school-age persons. This probing for more efficient and effective mechanisms of public service was the over-riding purpose of the project.

In November, 1960, a research and demonstration grant was awarded to the Minneapolis school district by the Office of Vocational Rehabilitation to help enable this exploration. The application had been developed with and supported by the Minnesota Division of Vocational Rehabilitation and a community advisory board whose membership represented many community resources for work with the retarded. Considerable pilot work had been done, including a research project made possible through the cooperation of Opportunity Workshop of Minneapolis (Krantz, 1960). This pilot experimentation, in combination with employment of Minneapolis school staff over a previous two-year period to develop job evaluation and placement opportunities for special class students, provided a firm and advanced point of departure in initiation of Research and Demonstration Project 681.

Project 681 was thus undertaken to evaluate whether this particular district's programs of special education and vocational rehabilitation were contributing all that they might to easing the personal-social problems associated with the deficiency of functioning known as mental retardation. The project had the practical, direct-action objective of testing and demonstrating procedures which would be generally useful in special education and rehabilitation programs for the retarded. The objectives were divided into four specific areas for study:

1. To demonstrate and evaluate the types of program and training facilities which could be promoted or set up within a public school framework to best serve the purpose of effectively preparing adolescent retarded for employment and community responsibility.

2. To use findings of the research to gain understanding of the problems and to develop practices calculated to result in maximum benefit for the retarded.

3. To facilitate coordination of community services directed to common goals of promoting the occupational adjustment of the retarded.

4. To develop basic information and techniques for promoting the vocational adjustment of retarded students which could be put to use in rural or less populated areas.

Obviously, many choices regarding investigative directions had to be made to reduce such broad goals to manageable areas of inquiry which would contribute significantly to solution of the basic questions at issue. Effort was made to pick realms of investigation which would shed light on the most critical issues involved in program planning decisions.

It was apparent that there was need for a more systematic picture of the ecological niche into which the retarded of the community would need to fit. There was need for more precise information about what kinds of people were being called retarded under the operational definitions prevailing in the particular school and community. And there was need for more factual information about social-administrative factors which might be blocking or distorting public efforts to provide effective special education-rehabilitation programs for the school-age handicapped. Project 681 addressed itself to the task of supplying planning information and devising more effective and efficient ways of operating.

Chapter 2

REVIEW OF RELATED LITERATURE

An investigation addressed to as broad objectives and as many sub-problems as those incorporated in Project 681 necessarily draws upon publications covering many facets of mental retardation. Since one of the major purposes of the Project was to explore for a modus operandi which would help to fill a worrisome gap in rehabilitation service, some publications reflecting on this point are reported in this section. Other related findings can be incorporated more meaningfully in discussions of the various sub-studies through which the broad questions of Project 681 were explored.

At the national Council for Exceptional Children convention in 1960, Evelyn Deno, Consultant in Special Education and Rehabilitation for the Minneapolis Schools, presented a paper concerned with coordination of community effort in vocational training for the retarded (Deno, 1960). Needs in curriculum provisions and new patterns of secondary school programing were discussed, including a proposal for an experimental facility to explore the possibilities of utilizing the school system more effectively as a vocational and rehabilitation oriented resource. Project 681 materialized this idea.

Stereotyped thinking about mental retardation is still all too prevalent among the lay public who must pay for the services and even among professional people, educators, counselors, social workers and doctors who should be better informed. There is a general awareness of the problem of mental retardation but too little appreciation of the diversity of abilities and needs found among people so labeled, and too little appreciation of the number of people involved or of the relation of functioning to social circumstances. The public's image of the retarded is largely that of the more severely disabled clinical type.

Many people in significant decision-making positions still regard mental retardation as a disease entity which "causes" poor performance. There is still insufficient accommodation to the fact that a variety of conditions may lead to impaired intellectual and social competence. As one writer comments, "We are more intrigued by galactosemia than challenged by slums and poor schools." (Hobbs, 1964, p. 829.) Perhaps the numbers having suffered galactosemia compared to the larger numbers falling in the "slums and poor schools" realm of origin influences the reaction. The smaller numbers of clinical cases seem so much more comprehensible and manageable.

The President's Panel on Mental Retardation stressed the relation between mental retardation and health care (Mayo, 1963). The fact that more than one-third of mothers in cities of over 100,000 population are medically indigent and receive little, if any, prenatal care, that toxemias of pregnancy are five times as frequent among these groups as they are among higher income groups, that the rate of infant mortality and premature births is high among them and that there is, in turn, a direct link between prematurity and mental as well as physical defects and illness is not adequately connected in public thinking and action planning with the rate of mental retardation prevalence in these same socio-economic areas.

We are confronted with permutations in the social scene which set new parameters on our social planning. Increased automation and industrialization make self-support through competitive employment impossible for people without skills. Expanding population and the rising amount of school dropout increase competition for dwindling unskilled jobs. Changes in the family structure stemming from divorce, separation, desertion rates, illegitimacy and early marriage result in more families headed by women who have lower incomes and possibly less adequate socializing influence over growing children than father-supported families provide (Burgess, 1964).

The complex of adjustment-depressing forces bearing down on children who grow up in families dependent upon public welfare is illustrated in a recent nation-wide study by Burgess (1964). This study involves families receiving Aid to Dependent Children, but it reflects the living conditions of all children growing up in dependent families. Such conditions can be expected to have significant impact on a growing child's coping capacities. Such conditions may contribute significantly to the inadequate functioning which may eventually lead to the child's being educationally classified as mentally retarded.

The Burgess findings reveal that there has been a striking drop in the proportion of families on ADC due to death of parent. This is primarily due to expanded coverage under Old Age, Survivors, and Disability Insurance. Over 65% of all ADC families are now dependent because of divorce, separation, desertion, unmarried parenthood or imprisonment of the father.

There has been a notable growth in the number of urban and non-white recipients of ADC during the past decade. The number of families on ADC continues to increase (a 26% increase between December, 1950 and December, 1960, though the number of families in the general population increased just over 16%). As of September, 1963, almost a million families were wholly or largely dependent on ADC support.

Dr. Burgess' study found these families to be large (median size 4.3 in contrast to a median of 3.3 persons per family for the country as a whole). The number of ADC children born out of wedlock increased 25% between 1950 and 1960. Nevertheless 81% of ADC children were born to legally married persons.

The unfavorableness of the circumstances within which these children must develop is indicated by the median monthly income of the Burgess sample ($133 average, with 68% having incomes of less than $160 per month). By way of comparison, it may be noted that in the same year (1960) only 23% of United States families had incomes of less than $4000 per year.

Another index of environmental adequacy is the amount of available living space within which children may do their growing. In the country as a whole, 12% of all occupied homes have more than one person per room living in them. Over 43% of the homes in Dr. Burgess' ADC sample had more than one person per room. Apparently a high proportion of these children from economically dependent families are developing in critically overcrowded circumstances. The overall picture suggests that these families do not approach a standard of living conducive to development and maintenance of adequate physical and mental health.

The educational and occupational data for the children studied by Burgess were discouraging. From ages seven to thirteen they were enrolled in school at the same rate that children in the general population were enrolled, but from ages fourteen to seventeen, 16% fewer of the ADC group were in school (91% for the general population in 1961, 75% among ADC children). Educational retardation was evident in 22% of ADC children but in only 10% of the total population of this age. Over 75% of the ADC children over eighteen did not complete high school while only 38% of the eighteen to twenty-four-year-olds in the United States did not do so. Of those graduating, only 2.6 % went on to any kind of post-high school training, including vocational or trade schools. In the general population, 23% in the age group eighteen to forty-five years had gone on to colleges or universities alone (i.e. not including trade or vocational schools).

The lines of evidence emerging from such studies when related to the findings of Project 681 and such reports as Sarason and Gladwin's (1958) confirm the need for coordinated health, welfare, education, job training and guidance services. Such services are necessary to combat the performance-depressing effects of the multiple factors which influence whether the individual retardate will be a dependent or independent member of society. The evidence suggests that heavy overlap may be expected in the clientele caught up in the various programs now being promoted through special federal aids. Mental retardation is a multiple problem syndrome in more cases than not.

The problems of poverty and mental retardation have been brought into prominence partly through accidents of history and political movement, but, as Hobbs (1964) notes, mental retardation is being redefined to recognize the preponderant involvement and educational influences in the overall problem. Sarason and Gladwin's (1958) review of research on the psychological and cultural correlates of mental subnormality provides ample documentation of the hypothesized relationships. There is evidence that a considerable proportion of mental retardation could be prevented through proper medical care and a better growth milieu for children.

A number of recent publications address to the question of how we are going to find the manpower needed to put prophylactic and rehabilitation programs into effect. There is an emerging consensus that the old ways of working are not going to be adequate to cope with the magnitude of the problems represented by our present rates of social dependency.

Vail (1964) has presented a thought-provoking treatise on the organization and characteristics of the service systems in our public domain. He distinguishes between "voluntary market" and "community problem-solving" systems of service provision. He does not maintain that there are just two systems. He recognizes a multiplicity of systems or possibly one big system with at least these two poles. He defines these systems by citing some of their characteristics, cautioning as he does so that items must be viewed as contrasting shades or trends, not necessarily as mutually exclusive opposites.

Table 1 (from Vail, 1964)

Characteristics of Community Problem-Solving Systems and Voluntary Systems

Community problem-solving systems (Example: public health officer)	Voluntary market systems (Example: private physician)
Target is community problems.	Target is individual problems.
Created by public mandate, of necessity for the common good.	Created by humanitarian concern.
Government-based, insofar as program is necessary.	Government may participate insofar as other resources are insufficient.
Not expendable.	Expendable.
Government-operated.	Government (tax) supported, community (donations) supported, or private.
Authoritative.	Non-authoritative.
Hierarchical: accountability progresses stepwise; sharp, direct.	Non-hierarchical: accountability diffuse.
Problems defined by public concensus, from outside the system.	Problems defined by participants, within the system.
Case intervention and withdrawal on basis of community need.	Case intervention ("opening") and withdrawal ("closing") on the basis of interpersonal contract.
Interpersonal relationship triangular: state-agent-object.	Interpersonal relationship dual: purveyor-user.
Mutual acceptance not relevant: freedom of choice limited.	Mutual acceptance essential: freedom of choice great.
Staff identified with body politic.	Staff identified with profession.
Non-prestigious.	Prestigious.
Occupies periphery of humanitarian industry.	Occupies center of humanitarian industry.
Parsimonious: concern with savings.	Extravagant: concern with amenities.
May become impersonal. (Problem: related to size or monopoly?)	More easily remains personal.
Validated statistically by reduction in incidence of problems.	Validated statistically by usage volume, or by popularity, existential testimonial.
Able to operate or contract for voluntary type programs: i.e., able to cross over.	Not able to cope on their own with community problem-solving; i.e., not able to cross over.

Table 2 (from Vail, 1964)

Comparison of Community Problem-Solving and Voluntary Systems

	Auspices	Examples	Problems
Community-Problem Solving	Government-operated	State Hospital County Welfare Dept. County Health Nurse	Sociodystonic life style: Troublesome careers
Voluntary	Government-supported	Community mental health center	Symptomatic dysfunctions: Private pain
	Community-supported	Family service agency	
	Private	Private psychiatrist	

Vail notes that a government-operated community problem-solving system may enter effectively into voluntary-type operations but that this transfer does not and seemingly cannot work in the other direction. He warns that the voluntary market systems cannot really cope with the hard and bitter tasks of community problem-solving. Community problem-solving has a never-ending responsibility which society cannot reject. The problems remain and, unresolved, exact their social toll.

Two books reflect the character of today's public health, mental health and mental retardation concerns. Hollingshead and Redlich's Social Class and Mental Illness: A Community Study (1958) revealed the startling fact that the kind of treatment resulting from diagnostic study was likely to be more closely related to the socio-economic status of the patient than it was to the diagnosis, age or sex of the patient. If the patient was from the lowest socio-economic group, he received some kind of quick therapy such as electric shock. If he came from a high socio-economic group, he received extended, more expensive, talking-type treatment. If he was a member of a prestige family as well as affluent, he received extended verbal therapy, but at a discount! This pattern of relationship was evident not only in the treatment provided in private practice but in the treatment provided by clinics and other publicly supported agencies.

The central thesis developed in Albee's (1959) Mental Health Manpower Trends is that since the prospective supply of people for training in the mental health professions is limited and demands for services continue to grow more rapidly than the population of the country, there will not be in the foreseeable future enough professional people to meet the demand. The implication seems to be that our traditional service paradigms can never hope to cope with the exploding need. Since large cities have inordinate numbers of the kind of child described in this report, needs of the public cannot be met if traditional practices continue to be rigidly followed. Hobbs (1964) recommends that mental health training programs be revised to give an attention to mental retardation which is commensurate with the responsibility which must be executed.

A number of professional people have attempted to alert their professional co-workers to the inappropriateness of their training for dealing with the realities which shout for attention. In his presidential address to the American Psychiatric Association in 1963, Branch warned his fellow psychiatrists that too few of their profession were prepared to deal with the real, hard-core problems of the community.

Hobbs made a similar point in his address to the American Orthopsychiatric Association in 1964. He recommended that the traditional responsibility of the doctor-patient, or counselor-client relationship, so long conceived as being carried out on a direct one-to-one service basis "must be reconceptualized to define the responsibilities of these specialists as workers with other professionals who can contribute to the development of social institutions that promote effective functioning in people" (page 827). Hathaway speaks in a similar vein (1964). The point applies with equal validity to the work of vocational rehabilitation counselors.

In a recent Mental Health Newsletter, Vail (1964) warns the training of professionals (in this case psychiatrists) must address itself to the "perplexing, tiresome, individual and social miseries of our time." He notes that training programs in the mental health field (meaning mainly psychiatry and clinical psychology) are oriented almost exclusively to the voluntary market system. Hobbs (1964) calls attention to the same tendency, though the same terms are not employed. Training manuals for rehabilitation counselors still use language and descriptions of counselor functions which are geared to the physically handicapped rather than to the mentally handicapped who constitute the major portion of the disabled.

Studies of trends in vocational rehabilitation service to the handicapped show that Vocational Rehabilitation agencies are still giving considerably more service to the physically disabled than to the mentally handicapped. This situation continues in spite of the fact that certain kinds of physical disability have been sharply reduced through preventive measures. Only 121 cases of poliomylitis were reported in 1964; 57,879 cases were reported in 1952. The proportions of adventitiously deaf have declined considerably within the total population of the hearing impaired, and the occurrence of blindness in children has been remarkably reduced through better control of R.L.F.

The Minnesota Studies in Vocational Rehabilitation conducted through the Industrial Relations Center of the University of Minnesota (1958-1964) indicated that in the past, rehabilitation counselors have served only a small proportion of the retarded in their clientele. In one study, counselors reported the retarded to be the most difficult clients to serve despite the fact that the majority of these clients were still relatively young. An Iowa study (1964) reports that the majority of the retarded were not familiar with the services offered by the Iowa Division of Vocational Rehabilitation.

Obviously, we are not addressing to community needs in the proportion and of the character represented in the persisting social reality. Professional people and agencies have, in effect, been saying: "This is what we do. If you need what we do, we can serve you."rather than "Let us determine what the need is and design a service to meet it." One factor preventing this approach to community problem solution is that seldom is one agency in a good position to gain an overall impression of the range of needs existing. Each deals with the select clientele which the agency's history has caused to gravitate to its door.

A study of social problem cases in one Minnesota county confirmed what all people in public education would suspect, namely, that more of the identified cases were known to the schools than to any other single agency (Anoka County, 1964). The largest segment of public service provided for the mentally retarded always has been and logically always will be provided through the public schools. Public education has been conceived as an instrument for serving individual goals while simultaneously furthering the overriding goal of making a satisfying way of life available to all. The data emerging from Project 681 confirm that more service can be made available to more clients when the resources of money and professional skill are funnelled through the school channel where they can readily be brought to bear when and where the clients are in a position and disposition to use them.

Hobbs (1964) suggests that 75% of our resources be devoted to the mental health problems of children, reserving only 25% for a holding action with adults. Whether the proportions are correct or not, the point is that there is need to break the chain of dependency at its preventive end, which is at the level of the child's early and continuing education.

The curricula of special programs for the retarded have seldom been established on the basis of research. Originally, special educators attempted to find useful content in the regular school programs and to modify and supplement this content in setting up their special programs. At this time, parents were insisting that public bodies support the venture of providing education for their youngsters. They insisted that "schools" be established and "teachers" hired to instruct them. This reflected the hope of parents for their children's academic achievement (Bates, 1962). Studies comparing the reading achievement of retarded students in special classes with the reading achievement of retarded pupils educated in regular classes reflect preoccupation with the same "academic" objectives.

Because of the limited academic success of the retarded, because of concern over the future of older children, and because there were few post-school opportunities, more attention has been directed toward attainment of realistic "vocational goals." There has been some shifting of emphasis from developing retarded children "academically" to more emphasis on development of independence and communication, on social and motor skills, on diversional activities, on development of personal qualities, qualities presumed to be more centrally related to the ability of the retarded to function as contributing members of society.

Attention is now being directed toward developmental aspects of training for employment. DiMichael (1964) presents a rationale for articulating the special education program with later vocational rehabilitation objectives. The "Texas Plan" attempts to synchronize the scope and sequence of the curriculum for the retarded to this same end (Eskridge, 1964). Hopes for continuation and extension of Project 681-type activities address to similar goals. (See Chapters 14 and 15.)

A number of studies have tried to assess the question of whether the retarded are employable and to assess the factors related to employability. Some of those incorporated in the thinking at the time of Project 681's initiation included the well-known study done by Baller (1936) and the follow-up of the same population by Charles (1953). Baer's study (1960) taps the same realm. In general, these studies indicate that around two-thirds of the educable retarded who had been in special classes were able to achieve some degree of employment in adulthood under social conditions existing at the time of the studies. There was some evidence that few retarded scoring below IQ 60 on individual intelligence tests were capable of maintaining themselves successfully in the open job market. More recently, efforts have been made to consider what may be done to render less able clients more employable and to identify which among those who score lower in IQ may nevertheless be able to achieve some degree of economic self-sufficiency (Fraenkel, 1961).

At initiation of Project 681, DiMichael's (1959) classification system seemed reasonable and provided a starting point for conceptualizing the kinds of management options which would need to be developed. His division into: 1) the directly placeable group (immediate transition from basic school program to job), 2) the deferred placeable group (job preparation before employment), 3) the sheltered employment group, and 4) the self-care, non-self-supporting group, still seems to provide a logical breakdown for planning purposes. The critical problem is that of finding means of assuring that no client falls into or is consigned to a lower level than he needs to because of a self-fulfilling prophecy regarding his employment potential. Prediction of low outcome can seduce those responsible for a child's education management into providing insufficient demand for growth. Project 681 addressed primarily to DiMichael's second and third categories since this seemed to be the band where help might mean the difference between dependence and independence. The attempt to develop predictive constructs reported in Chapter 13 is relevant to this point.

A 1963 master's thesis by Phelps explored the relationship of employer attitudes to employment of the retarded. The investigator found a significant relationship between personnel managers' attitudes toward employment of the retarded and 1) the educational level of the personnel manager (the higher the educational level, the lower the prejudice against), 2) the length of time the personnel manager had been on the job (the longer he had been on the job, the less likely the personnel man was to hire a retarded person), and 3) the size of the organization (the larger the organization, the less favorable the attitude).

The study indicated that personnel managers of hospitals and motels were more favorable to hiring mentally retarded persons than hotel, laundry, restaurant, and nursing home managers were. The majority of all personnel managers, however, indicated that the retarded could do productive work and that most organizations should be able to employ some retarded persons. This attitudinal response is what one might expect to get when asking a question of this kind. Chapter 12 may generate interesting hypotheses about the factors operating in successful placement of hard-to-place people.

In fairness to the built-in problems of personnel managers, it should be noted that a personnel manager is usually employed for the purpose of screening out inadequate applicants. The personnel manager can do this because the people screened out are not his problem. The ones screened out remain a problem for society which must be dealt with, however. This study serves to illustrate the ways in which the systems which society develops to cope with mass population problems in a highly competitive, technologically-based economy form increasing barriers to community assimilation of the retarded.

The published literature throws little light on the question of how the retarded view the kinds of jobs they are capable of performing. Rehabilitation counselors and school work program supervisors are keenly aware of the unreality of the aspirations of many retarded clients and their families. Jobs which are entry or internship jobs for the more able may be high attainment, permanent careers for the retarded, but they may not so view them. Both the retardate and his parents are often unwilling to accept the kind of job the retardate is able to perform.

Several studies have established that most youths over the age of fourteen are able to rank jobs according to what they believe the status grade of the job to be. Himmelweit, Halsy and Oppenheim (1952) conclude that youth of this age have acquired essentially an adult view of prestige of occupations. Job prestige ratings remain remarkably parallel in all age groups above age fourteen. Gunn (1964) found that boys in grades seven, eight and nine reflected an emerging awareness of social class and an increasing tendency to use other criteria than the social service value of the work in ranking job status. Contempt for what was believed to be inferior work was not shown below the high school level.

It might be assumed that the limited ability of the retarded would provide a protective insulation from possible feelings of inferiority engendered by the low prestige value of the unskilled jobs they are most likely to be able to perform. Teachers and counselors view this opinion with skepticism. They gain the impression that retarded adolescents are keenly aware of differences from their peers and are keenly aware of the achievements which their peers admire and respect. They see little evidence to support the idea that the retarded are protected from sensitivity about their inadequacies by a blunted social insight that is directly correlated with mental ability. Some of the studies on the social adjustment of retarded students in regular classes and special classes would seem to bear out this opinion.

Since the time when Project 681 was instituted there has been a striking increase in the number of school systems incorporating work-study programs in their employment-preparation curricula for the retarded. A number of these have been described and results reported in the recent publications. A number of programs following the 681 prototype have been initiated since Project 681 was described by Vocational Rehabilitation Administration in a 1963 administrative communication.

The Texas Division of Vocational Rehabilitation achieved a breakthrough in facilitation of interagency service collaboration in its plan for closer special education-rehabilitation functioning through the medium of cooperative agreement contracts. Job outcomes of clients served through the Texas program are reported in a recent publication. The Texas model, described as a prototype of a state plan in Vocational Rehabilitation Administration communications (VRA: MR Series B-2, 1963), is being explored for its potentialities for enabling continuation of the work begun under Project 681 and for expansion of the concepts developed and the operational system to all types of handicapped clients who need a special kind of intensive service. The Project 681 program has been different from the "Texas Plan" in that it incorporates a rehabilitation center-type service in the total service package.

There has been continued and increasing country-wide interest in the blending of school and vocational rehabilitation resources. Since the agencies serve common objectives at certain age levels, this attempt to relate has a measure of logic. How extensive this blending of resources can be will depend partly on the degree to which vocational rehabilitation agencies can lend themselves to broad service objectives.

This concern for coordination in service coverage is part of a general concern with the responsibilities of the school and the community in youth development and the potentialities of the public schools as instruments for improving social conditions and conserving human resources. With increased concern about the need for public intervention on the dreary, generation-by-generation reiteration of social dependency, there will need to be continued investigation of which agencies are sufficiently compatible in philosophy and objectives to conduct collaborative programs on a sustaining basis.

In general, review of the literature suggests that this is a period of much forward movement in services to inadequately functioning children and youth. It suggests that the period ahead will call for a heavy emphasis on cooperative interagency planning and modification of traditional agency and professional roles to encompass current problems.

Chapter 3

HISTORICAL BACKGROUND

This report summarizes the purposes, design and results of Project 681. Before this realm of reporting is entered it may be helpful to sketch in some of the philosophical sets, hypotheses, and historical background which fed into the project's initiation and influenced decisions on courses of action as the project progressed.

Because rehabilitation effort crosses conventional professional, agency and departmental lines, the activities and outcomes of a project cannot be understood without consideration of the forces prevailing in the context in which the work was designed and carried out. These forces are the real-life variables which must be dealt with in order to achieve the practical objectives of the rehabilitation effort.

A rehabilitation agency often has little direct administrative control over many factors which vitally affect its work. This element is operative at all levels of conception and program operation. It is difficult, if not impossible, to judge whether a method or an outcome is "good" or "bad" unless one takes into account the circumstances surrounding the attempt.

The Minneapolis School District is one of the oldest school systems in the State of Minnesota. The first school in the area, the "Primary School" conducted by the University of Minnesota, was opened in the St. Anthony settlement. The City of Minneapolis started its first school immediately upon acquiring its charter from the territorial legislature in 1856. The two cities, St. Anthony and Minneapolis, merged in 1872 although two separate school systems were maintained until they were joined by legislative action in 1878. The annual reports of the early superintendents reflect a deep concern with making education available for every child.

The people of Minneapolis through their Board of Education demonstrated concern for the needs of handicapped children before the turn of the century. School Board records indicate that as early as 1897 a sub-committee of board members was sent to visit the State School for the Deaf to consider the advisability of providing special classes for the hearing impaired within the public school program. The visit apparently resulted in board consensus that a local day school program would be highly desirable. This first attempt at establishing day classes for the hearing impaired was later abandoned, but not for all time.

The earliest sustained venture into special education by the Minneapolis Schools was four classes for "mentally defective children" instituted in October 1912, followed closely by a class for "stammerers" opened in November of the same year. Services for deaf children followed in 1915. In 1919, "sight-saving classes" were opened. In 1925 Dowling School for Crippled Children opened.

It is noteworthy that decisions to start a special education program preceded provision of any special state aids to help finance such programs, though state aids came into being shortly thereafter as a result of efforts on the part of Michael Dowling for whom the Minneapolis Dowling School for Crippled Children is named.

It is unquestionably significant that the special education program in which Project 681 was embedded was nearly fifty years old at the time the project was instituted. School systems initiating special education services for the first time in the last decade benefit from the experience of these earlier pioneers and proceed from current research knowledge in the field.

If change is in order, mature systems must persuade experienced people of the wisdom of change from familiar, established ways of operating. Under such circumstances demonstration can provide a helpful vehicle for evaluation and influence. New systems have the disadvantages associated with inexperience and lack of familiarity with the deep-seated problems which are tenaciously inherent in the task. The program involved had the advantage of being one which had experienced the trial and abandonment of many methods. It had also lived long enough with changes in clientele and the frustrations which accompany work with the handicapped to be realistic in its hopes and aspirations.

During the fifty-year period represented, the Minneapolis school system, like other urban systems, had to adjust to significant changes in the characteristics of the children served and to changes in the attitudes and ability to pay of the population providing support to the schools. Pockets of social deprivation have appeared as the flight of the middle class to the suburbs has produced its usual effect of leaving the less advantaged behind to fill the school rolls of the inner city system. The Minneapolis school system has experienced a declining total enrollment but an increase in the proportion of handicapped. A higher proportion of the children enrolled come from the kinds of background which contribute heavily to physical defect and inadequate adjustment. In addition, parents move into the city from out-state areas without programs in order to procure special education services for their handicapped children. The Minneapolis School District is, thus, an urban area experiencing the transition which all larger cities have seen.

The Minneapolis school system is organized on a 6-3-3 plan. Special classes for the retarded begun in 1912 were at the elementary level. Junior high school classes were initiated in 1917. The first senior high school level classes for the "retarded" were opened in the school system's Vocational High School in 1946. Records indicate that great pains were taken at the point of initiation of these first senior high school classes to develop the rationale and justification for serving a not-quite-normal population under the Vocational Education Act as its intent was interpreted at that time.

Need to stay within the bounds of what was considered acceptable under the standards for implementation of vocational education, as then envisioned, naturally resulted in need to select applicants according to pre-specified criteria. Such selectivity in intake is a factor which, of course, is highly significant in evaluating program merits and is of particular interest at this time when the objectives of vocational education programs may be undergoing review and adjustment in terms of current social needs. Evaluation of the Vocational High School program and its particular clientele consequently became one of the specific sub-studies of the project.

This selectivity in acceptance of students for vocational training had another effect which was felt immediately - there had to be some place for the rejects to go. Special classes were soon opened in other comprehensive high schools in the city until there were twelve special classes located in six senior high schools (including Vocational) at the time the proposal for Project 681 was developed in 1959.

Notable also is that, in 1930, the Minneapolis school system entered into a contract with the Minnesota Division of Vocational Rehabilitation to establish a branch office of the Division of Vocational Rehabilitation to serve Minneapolis school-age handicapped students (under age twenty-one) who were eligible for rehabilitation service. Knowing that the rehabilitation service available for its students was seriously limited by the number of personnel the state Division was able to make available, the school system agreed to pay the salary of one counselor and a clerk and to provide office space in order to secure more service for Minneapolis students. The district office of Vocational Rehabilitation supplied two rehabilitation counselors and a clerk to this program. Thus, this yielded a total of three counselors to man what was then designated as the Minneapolis Branch Office. The Branch Office served parochial and out-of-school cases under twenty-one as well as handicapped students enrolled in the Minneapolis Schools.

The importance of regular school administrators to the success of special education-rehabilitation programs for exceptional children cannot be overestimated. The degree to which administrators view the schools as having a responsibility to all children and what they conceive the character of that responsibility to be is critical in determining the directions which a program is free to take. Planning for Project 681 had the advantage of advice from supervisors of the school system's vocational education programs including consultants in home economics, work-study programs and industrial arts. There was a considerable body of experience to draw upon in designing the program.

A climate of sincere interest and steady, on-going consideration for the service needs of the handicapped has been evident throughout the school system's history at all administrative levels. Project 681 was able to exploit an analysis of the special class population conducted in 1932 by the school system's Director of Research and Census, who is now the Assistant Superintendent of Secondary Education under whose administrative jurisdiction Project 681 was conducted and future directions in secondary level services have been determined.

At the time Project 681 was initiated, the Minneapolis Special Education program for the retarded involved ninety-one teachers and over 1300 students, including multiply-handicapped retarded children served in the school system's program for crippled children. The total program of special education of the Minneapolis Schools serves over 5000 students a year in all eligible categories. During the most recent complete school year (1963-64), the numbers served in the various program categories were divided as follows:

Table 3

STUDENTS SERVED IN MINNEAPOLIS AND IN MINNESOTA PUBLIC SCHOOL SPECIAL EDUCATION PROGRAMS DURING THE 1963-64 SCHOOL YEAR

Category	Total Served in Minneapolis Special Education Program	Total Served in Minnesota Public School Special Education Program (including Minneapolis)
Speech	1,947	16,392
Mentally Retarded	1,519	6,803
Vision Handicapped	69	239
Hearing Handicapped (Upgraded Program)	221	412
Orthopedic	215	490
Special Learning Disabilities (S.L.D.)	515	1,366
Homebound and Hospital	514	3,316
Totals	5,027	29,018

The Minneapolis Public Schools' special education program serves the entire metropolitan area in its programs for the hearing impaired, crippled and the blind. The difficulties of providing suitable service for exceptional children in scattered rural areas is well known. The metropolitan areas provide disproportionate amounts of the state's special education service.

These demographic characteristics combined with historical developments contribute to two factors germane to conception and interpretation of Project 681: (1) historically, the state has had a relatively high rate of institutionalization of the retarded, and (2) parents who do not wish to have their children institutionalized or served in residential schools move to the urban areas where special education services are available. The existence of military bases in the area (service men with handicapped children are assigned to bases in areas where special education service is available), the early development of special education programs in the Minneapolis Schools, and the existence of widely recognized medical-rehabilitation centers in Minneapolis have contributed further to disproportionate gravitation of handicapped children to the Minneapolis area. Also, handicapped children who might otherwise attend parochial schools are commonly enrolled in public school special education programs. These factors of gravitation to the metropolitan area, plus the social pathology which often leads to educational problems in the larger cities, contribute to the highly disproportionate handicapped population served by the city school districts represented in Table 3. This concentration of problems seemed to make Minneapolis a logical site for a demonstration program, since the city was also a natural focal point of activity and visitation for the upper midwest area.

Another significant element in the complex of factors influencing the development and ultimate outcomes of Project 681 was the fact that Minnesota had passed a new special education law in 1957. This new law included a number of modifications of the previously existing aid program which affected what could be done in programs for the retarded. Practices in funding and programming affect the ease with which special education programs can be coordinated with services for the handicapped offered under non-school auspices. Features of the 1957 law which are directly significant to consideration of the methods developed included:

1. The 1957 Minnesota special education law made provision of public education service for "educable" handicapped students mandatory. Service to "trainable" retarded was enabled on a permissive basis. School districts serving trainable retarded were, however, authorized to receive the same kind of special aid made available to programs for the educable retarded.

2. For the first time in the state's history a department of special education was established within the State Department of Education. This department was combined with the Division of Vocational Rehabilitation to become one department of special education and rehabilitation under an assistant commissioner who had had substantial experience in the field of vocational rehabilitation as well as experience in administration of public school programs.

3. The 1957 law changed the basis of aid payment from a per pupil reimbursement to reimbursement of a portion of the salaries of all personnel deemed essential to a team approach to comprehensive special educational service for handicapped children. Special education aid was provided for the salaries of teachers and other personnel such as school psychologists, school social workers, medical consultants and certain other professional and non-certified staff deemed essential to a service program.

   The change in reimbursement basis and the expansion of the concept of the kinds of people who might be needed to provide an adequate habilitation team affected significantly the facility with which special education and rehabilitation efforts could be merged, not only in the conduct of Project 681 but also in the School-Rehabilitation Program which grew out of the project.

4. The new law extended coverage of special education aid to include children who were handicapped because of emotional disturbance or special behavior problems. All professional workers in the field are aware that pupils whose adjustment is impaired by reason of social and emotional factors frequently find refuge in special classes for the retarded when no more suitable program alternatives are available. The enabling of services for children with special learning problems of this character, along with the incentive enablement awarded to the trainable retarded, has allowed for development of a greater variety of programs. More alternatives exist for coping with the highly diverse rehabilitation needs found among children educationally disabled for what may be described as "mental" reasons. Many children formerly educationally classified as "retarded" are now described as having special learning difficulties and served under the "Special Learning Disabilities" program.

5. The law established an Advisory Board on Handicapped, Gifted and Exceptional Children charged to act in advisory capacity to the state's three major departments of Health, Education, and Welfare to "aid in formulating policies and encouraging programs for exceptional children (and) continuously study the needs of exceptional children." This body assists in keeping the rules and regulations by which programs for the handicapped are implemented in tune with intent and current needs.

Moving from the state to the local level, it is significant that the Minneapolis Community Health and Welfare Council had for many years encouraged the growth and coordination of community welfare services of all kinds, including those for the retarded. The Family and Children's Service, a family counseling service which is part of this complex of community services, is over ninety years old. In 1956, the Council acted as a catalytic agent in promoting a cooperative research and demonstration project to evaluate possibilities for trainable retarded, which was conducted by the Minneapolis Schools and the Sheltering Arms Foundation. The Hennepin County Welfare Department was a member of the Council, as was the Minneapolis school system. A long history of harmonious cooperation between the public school and welfare agencies had been facilitated by the presence of school social workers on the school staff since 1917.

The national organization of parents of mentally retarded children had its origin at a meeting held in Minneapolis. The Minneapolis Association for Retarded Children has been a continuing member of the Community Health and Welfare Council. This agency (MARC) gave invaluable aid and support in development and conduct of Project 681. Representatives of the agency have participated actively in case conferences and evaluations so the organization could better serve as liaison agent, and so the agency could gain insights into gaps in coverage of needs of the retarded in the community. Volunteers from the MARC parent group served as interviewers in the follow-up study which was part of the project. MARC has presently initiated a daytime activity program to provide a service resource for retarded who cannot be brought to employable status.

Expansion of the university program for training professional workers with the handicapped and the availability of consultative help from University staff members in development of the project encouraged the effort. A series of studies of rehabilitation work in Minnesota conducted under the auspices of the Industrial Relations Center provided a fund of data relevant to the questions under investigation.

Too much cannot be said of the impact of extensive rehabilitation work going on in Minneapolis upon the design and execution of Project 681. The University of Minnesota's school of medicine has provided a cutting edge of leadership in development of physical medicine and rehabilitation technology. The Kenny Rehabilitation Institute has been an outstanding leader in this field, Minneapolis Opportunity Workshop was a pioneer in rehabilitation of the retarded. The Minneapolis Rehabilitation Center proved to be a strong resource in development of the technology which was used in Project 681. All of these agencies have given valuable and understanding help to Project 681. The idea of rehabilitation work was familiar to the community and a technology was available for application and development.

The history of special education and rehabilitation services in the community and in the state seemed to argue persuasively that the time was right to undertake evaluation of what had been accomplished, what seemed to be operating in the community field of forces, and what might be done to improve the services rendered. Both the special education and rehabilitation programs have existed long enough to provide a base line for evaluation of efforts. It seemed that the project envisioned could proceed in a climate of understanding and in a context of demonstrated compatibility of a wide range of related agencies. Agencies in the Minneapolis community were in unusual close communication and able to cooperate for the good of the community as a whole. This supportive climate seemed highly important and has proved so in the conduct and findings of the project. The close alliance and long-standing cooperation of special education and rehabilitation activities within the program of the public school involved is, unquestionably, one of the most significant factors in the conception, execution and outcomes reflected in Project 681.

Chapter 4

THE SETTING FOR THE PROJECT

Project 681 became an accepted part of the school system. School counselors, social workers and teachers looked upon it as a part of the schools' program. At the same time rehabilitation workers accepted it as part of the rehabilitation movement and utilized it as a respectable rehabilitation facility and resource.

The project itself strove to be concerned only with needs of the student-clients referred for services, not with establishing records of achievement. It set up no selection or pre-screening methods. It took all referrals and it attempted to look at them in terms of individual needs.

This effort involved the public school system and a complex of community resources. The development of the project cannot be divorced from this setting.

The School Program for the Retarded

Elementary level organization: Special classes at the elementary level were run entirely as self-contained units during the period of time that subjects in this project were of elementary school age. In most cases, children falling within the 50-80 IQ range were grouped into upper and lower elementary age levels, creating approximately a three-year spread in each group. No sub-grouping by ability within the categories was practiced except as this might occur within the self-contained class. By the time of the conclusion of the study this was no longer true of the Minneapolis program. When the Board of Education assumed responsibility for "trainable" retarded children, the program was split into "upper and lower track" divisions on the basis of multiple criteria, not just IQ. This policy change is too recent to have affected the population of this study, however.

Junior high school level organization: At the junior high school level, students were enrolled in special classes under special education teachers for their "academic" work and assigned to "regular" classes for such subjects as music, art, industrial arts, home economics, and physical education. The adjustive demand of integration was difficult for some pupils to meet. By 1960, it became apparent that some junior high school pupils were not able to meet the integration demands instituted. A special Transitional Program for these students was established. In this program pupils were not required to compete in any regular classes. This junior high school-level split into upper and lower track divisions occurred early enough to involve students later seen in Project 681.

Senior high school level organization: Students seeming to have strong performance skill (judgment based primarily on Wechsler performance score) were selected for assignment to the special vocational training program at the Vocational High School, which had been initiated in 1946.

They were enrolled half days in trade courses taught by the regular instructors along with the students of normal ability. Work in academic areas (social studies, mathematics, English, and so forth) was taken the other half of the day in special classes taught by teachers with special training to teach the retarded.

The rest of the senior high school level special class students were assigned to special classes in five different comprehensive high schools located in various areas of the city. Students were programmed on much the same principle employed in the traditional junior high school program, that is, academic work was taken with special teachers, non-academic work was taken in regular classes taught by regular program teachers.

The program at Vocational High School included work experience under supervision in the trade area in which the student was enrolled. Work-study programs were not a formal part of the special education program for the three-fourths of special class students who were not selected for the Vocational High School program until 1959, when preliminary work on the project began. It focused on the work training area.

The students in the project had been placed in special classes under policies of eligibility, intake and continuation which significantly influenced their characteristics. The minimum age of entry into special classes was seven years. The school system made no attempt to seek out or procure candidates for special education. All Minneapolis children enter kindergarten and are accepted as part of the regular class stream until their behavior and/or performance suggests that the child is not developing adequately. He is then referred for evaluation by the school system's Child Study Department. No student is placed in special class without recommendation of the Child Study Department. The major criteria involved in the Child Study Department decision is expected to be whether special class placement has prospects of being more beneficial to the child than remaining in regular class. In making this judgment, multiple factors must be taken into account - including the characteristics of the regular program and whether it was amenable to change through consultation.

The school program for the mentally retarded was developed to the point of an equivalent of a high school age level program. Upon graduation, students might receive either a "regular" or a "special education diploma," depending upon the number and type of course credits earned.

It is highly significant and central to the planning of programs for secondary level retarded youth that the Minneapolis Schools had tried to make available a "skill training program" for the retarded under its vocational educational program. Students were selected for this program (at Vocational High School and Technical Institute) who had difficulty in the verbal ability area but who scored above 80 IQ on performance tests. This policy was adopted in an effort to conform to the standards of the Vocational Education Act, which was then interpreted to require that students admitted to the vocational programs had to have "normal" ability to learn a trade. The problem to which Project 681 directed was that over 90% of retarded students had not been able to move to employment through this vocational preparation channel.

Community Structure and Resources

The project program was inevitably conditioned by the community structure within which it was designed to operate. Some of the service structure is unique to the Minneapolis area, but most of it is common to all the communities which have set up agencies and facilities to deal with rehabilitation-related matters.

It may be helpful to consider the project's place in the complex of services which have come, over the past two decades, to constitute the rehabilitative services provided for marginal and difficult-to-rehabilitate cases. Not all of these services are provided through the Vocational Rehabilitation agency, of course.

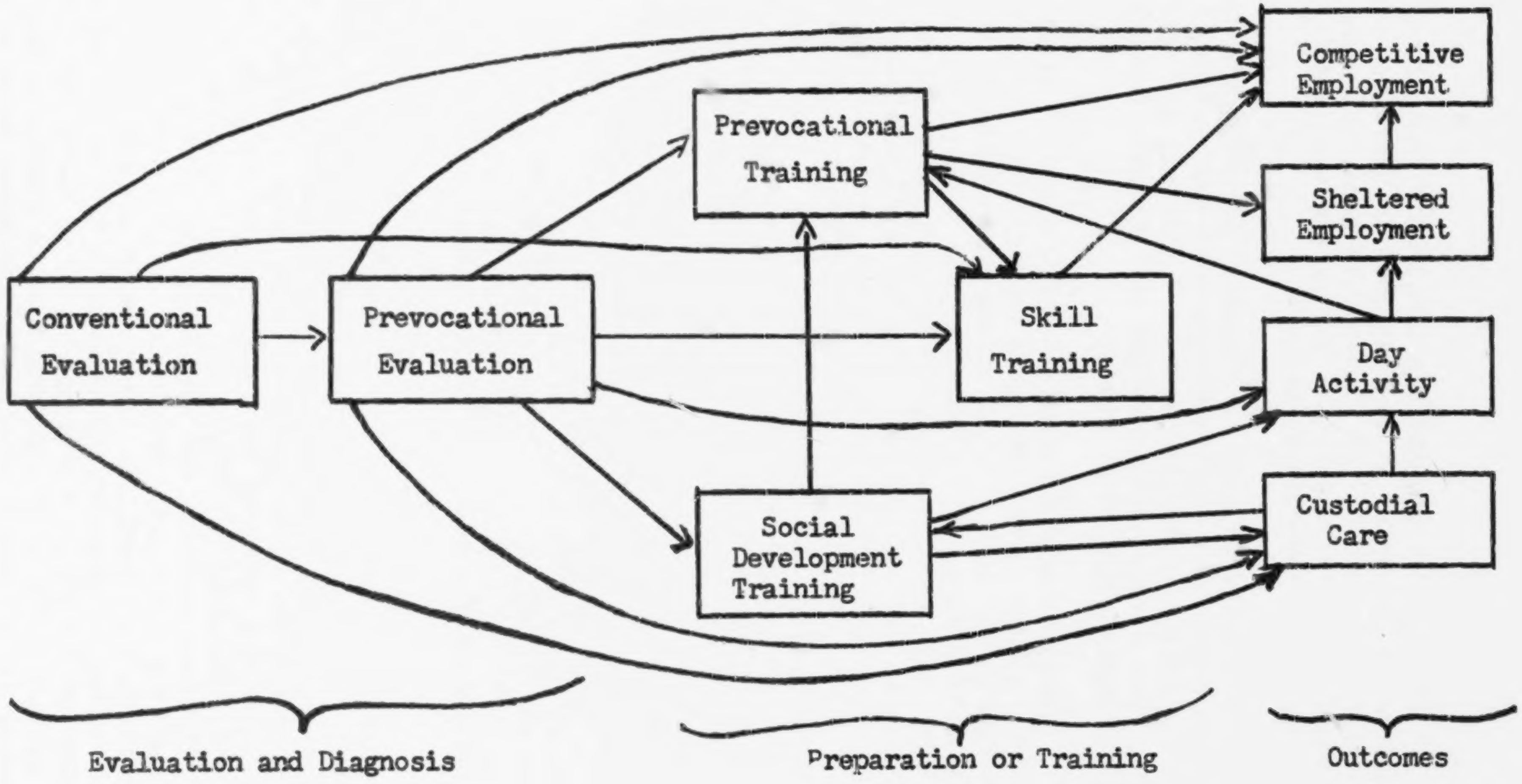
This complex of specialized "salvaging" services is designed to deal with the guidance, training, and occupational adjustment of the atypical and hard-to-rehabilitate kind of client whose problems are not solved by the normative testing, skill training, and conventional job-seeking methods used with "normal" people. Among these specialized services are prevocational evaluation, prevocational or personal adjustment training, vocational training, social development training, day activity, and sheltered employment. Some of these services are supplied through welfare agency channels, some through health agency channels, some through private agency sources, some through education channels. In Minnesota, the Division of Vocational Rehabilitation does not provide any of these services through facilities directly administered by that agency. All such services deemed essential to making Vocational Rehabilitation clients employable must be procured by purchase or referral to another agency.

Figure 3 illustrates the relation of these specialized "salvaging" services to each other and to conventional evaluation, conventional skill training, competitive employment, and custodial care. Because the terminology of these rehabilitation techniques is not well standardized, their definitions as used in this report are given below.

Confusion sometimes arises as to the distinction between services which may take place simultaneously or which use similar techniques, as well as between the primary emphasis of agencies offering similar services. The most common confusions are: between vocational education for adequately adjusted and mentally capable persons versus prevocational training which simultaneously works on improvement of work-related adaptive behaviors, between prevocational evaluation and prevocational training, between prevocational training and sheltered employment, and between social development and day activity. Confusion can be avoided if the primary purpose of each service is recalled. The primary purpose of evaluation is that of finding out, diagnosing, or deriving a course of action. The primary purpose of training or development is to bring about changes in the client. The primary purpose of employment is to provide a job, and that of day activity is to provide meaningful occupation short of employment. The chart and definitions given here attempt to avoid these particular confusions. Evaluation will be considered first.

Figure 3

Vocational Service Flow of the Severely Disabled and the Marginal Rehabilitation Client


Conventional Evaluation
Prevocational Evaluation
Prevocational Training
Skill Training
Social Development Training
Competitive Employment
Sheltered Employment
Day Activity
Custodial Care
Evaluation and Diagnosis
Preparation or Training
Outcomes

Conventional evaluation is vocational assessment of the classical type. A social-educational-vocational history is taken, supplemented when appropriate by a medical report. Tests are usually given, and are ordinarily of the short-sample paper and pencil kind covering aptitudes, interests, and personality screening. The tests are usually of APA Level A and B, and the guidance involved falls within the skill range of ordinary vocational counselors. Conventional evaluation is usually sufficient to the needs of adequate clients who have circumscribed disabilities. It is also sufficient to the needs of many retarded people.

Prevocational evaluation is an extension of or addition to conventional evaluation so as to accommodate the guidance needs of atypical and marginal people, those for whom conventional evaluation determines only that they have poor vocational prognosis. For example, many retarded people score below the employment norm on tests of mechanical aptitude even though they may have no special lack of the aptitude itself. Abstract tests are simply inappropriate for use with such people. Prevocational evaluation includes, but is not limited to, the work sample technique. It involves a practical assessment of the client's aptitudes, interests, work habits, and motivations. This assessment is typically done in an environment where skills and aptitudes can be observed in an actual-work setting. The technology of prevocational evaluation grew up in sheltered workshops, rehabilitation centers, and some specialized educational facilities. The life history taking is generally quite searching, the tests frequently are of clinical kinds (APA Level C), and situational testing is extensively used to bypass the failure of test-criterion correlations to hold up when atypical people are tested. A prevocational evaluation normally takes from two to six weeks of in-facility workup, and consequently is an expensive procedure reserved for clients whose vocational diagnostic problems are not solved by conventional evaluation. Like any other kind of evaluation, its purpose is to derive a course of action.

Skill training is the normal training in the skills of a particular occupation. It is usually given at the standard business schools, colleges, trade schools, area vocational high schools, or extensive vocational education sequences given in comprehensive high school, or on the job.

Prevocational training is intended to assist the trainee to develop basic skills, attitudes, motivational directions, and work habits of the sort needed in either sheltered or competitive employment. It is also known as personal adjustment training. It is usually carried out in a facility which features real or simulated work, since work experience is one of the training tools. Prevocational training differs from sheltered employment in its emphasis upon the client's employability. The trainee is expected to move on from this training to employment, sheltered or competitive.

Social development training has very basic and general goals with regard to its trainee's ability to function independently in social, purposeful, and (to some extent) productive settings. It is related to the idea of training for independent living in that it is one of the methods of promoting personal competence in society. In terms of the employability continuum, it is more basic and general than is prevocational training. Social development training starts with trainees who are not ready to face prevocational training, or perhaps even relatively trouble-free day activity, because of inadequate maturity in social and occupational affairs. The technology of social development training is just now emerging, and is used in some cases of retardation or emotional disturbance. There are some twenty-five facilities in Minnesota which offer this service and the related service of day activity, most of the facilities having come into being within the past year. The technology may eventually expand into use with other groups needing service, such as the sociologically disadvantaged.

The services just described are concerned with diagnosis and preparation. They are all vendable. That is, they may be purchased as service entitites, and rehabilitation agencies have accounting categories which correspond to them. However, the full rehabilitation process includes outcome as well. It includes those relatively stable and long-range occupational statuses for which the diagnostic and preparatory services are designed to equip the client. The outcomes will be considered next.

Custodial care is, by and large, reserved for people who cannot live competently in the open community. While institutions for the mentally retarded or the emotionally disturbed are the most conspicuous kind of custodial care facilities, it might also be appropriate to consider some foster homes, residential schools, and half-way houses in this category. Though some clients of this service will develop competence to move on to less dependent status, custodial care is often a terminal outcome for clients needing life-long care.

Day activity is occupation in purposeful activity, short of significant wages for the client. For those who cannot meet the demands of even sheltered employment but who can live in the community, it provides the meaningful activity which prevents personal deterioration and discontent. It is also a constructive service which may be offered as part of an institutional program, incidentally. Day activity differs from social development training in that it is not intended especially to modify the client. As this kind of agency evolves, day activity is generally the first service offered, and social development is then perceived as a needed preparatory service. Again referring to Minnesota, the twenty-five mostly-new day activity centers are evolving programs which are only recently coming into focus. Day activity is a case outcome inasmuch as it is indefinite in duration and may be legitimately terminal.

Sheltered employment enables partial self-support through employment for the handicapped worker under conditions which allow for his handicap's resulting in low production rate, need for special work supervision, inability to handle a full range of job duties, or need for special job engineering or adaptive equipment. It is almost always provided in a sheltered workshop, a rehabilitation facility which is authorized by the government to pay less than the usual minimum wage. Under the unusual provision of a handicapped worker's holding an individual sheltered work certificate, it may be provided under agency supervision of a private employer. Indefinite in duration, sheltered employment may be a permanent job for a rehabilitation client. Sometimes, however, a sheltered employee may improve his employability to the extent that he can later be placed in competitive work.

Competitive employment is work done for regular private or public employers at full wage and full production. It is the ideal goal of vocational rehabilitation for those clients who can attain it, because it demonstrates that the client's employment handicap has been removed or successfully circumvented. In competitive employment, the worker must be able to work and earn in open competition with all other job applicants. Rehabilitation services in cases where competitive employment is the outcome may include guidance, preparation, job placement, and supportive services while the job is consolidated.

Within the foregoing structure of rehabilitation service technology, Project 681 was framed and carried out. The major services which were incorporated into the service structure of Project 681 were: prevocational evaluation, including some conventional evaluation and modified by the need for educational as well as employment-oriented diagnosis; some aspects of social development training to deal with evident deficiencies in the students' prevocational readiness; prevocational training, at first to a limited extent but expanded as staff and facility were augmented and as methods were developed; some skill training, tailored to the needs of a few students; and job development services which enabled job placement and the support which stabilized the student in his new role of worker in the labor market. Since the project was designed to develop and demonstrate case service methods, its technology came into being gradually and attained formal structure as it was validated against experience. Further, at the close of the project period, additional directions for program development were evident and are being incorporated into the design of the new School-Rehabilitation Center which succeeded Project 681.

Not quite the same as service structure, which is, after all, an abstraction, is the structure of agencies in a community. Agencies have administrative and service responsibilities, and over the years they tend to divide among themselves the community's machinery for dealing with perceived human needs. Generally, there is some lag in meeting all the needs as they become evident. From time to time, unmet needs accumulate to the point where a new agency must be introduced in order to effectively deal with them. This phenomenon contributed to the emergence and design of Project 681. Because of this genesis, it will be helpful to consider some aspects of the community's agency structure.

Minnesota has a well-developed complex of rehabilitation resources, as is attested by the Directories of Rehabilitation Resources in Minnesota (1960, 1964). Minneapolis is the center of concentration of these agencies. The school resources are detailed earlier in this report. Minneapolis is the home of the first Assocation for Retarded Children, and of one of the first sheltered workshops for the retarded. A number of other agencies in the Community Health and Welfare Council of Hennepin County give services to the retarded. Among other agencies, the Hennepin County Welfare Department has a unique role, serving in loco parentis in many cases of mental retardation. This arrangement may require clarification here.

Under Minnesota law, the State Commissioner of Welfare may be appointed to serve as guardian of a mentally retarded person. This appointment is made at a court hearing, at which the retarded person is committed to guardianship and the county welfare agency is delegated by the State Commissioner of Welfare to carry out the guardianship. The client may require institutional placement, or he may require casework services in his own home; in any event, state guardianship is secondary to parental responsibility unless the parents are legally incompetent. In addition to formal guardianship in some cases, the county welfare agency is charged with an advisory responsibility in all cases of retardation, and can be called upon for casework by the parents or by another agency.

It is particularly pertinent to the present discussion that the local county welfare agency has, for many years, employed a job placement specialist who has carried out an effective program of placement. Consequently, a local employment market for the retarded has been somewhat developed, both in terms of employer acceptance and placement technique.

The sheltered workshop for the retarded, Opportunity Workshop, has already been mentioned. Established in 1953, and expanded in 1958 to include programs of prevocational evaluation and training, this workshop influenced the development of Project 681. The availability of a sheltered employment resource made it possible to gear some of the Project 681 program to this resource, a facility not yet available in every community. Another influence exerted by the Opportunity Workshop was in the area of program, with Project 681 adapting to its own setting some of the evaluation technology which had been developed in the workshop. A pilot study (Krantz, 1960) was carried out at the Opportunity Workshop in the spring of 1959, cooperatively with the Minneapolis Public Schools, wherein eleven special class students were jointly served by the two agencies for a period of seven weeks; some of the methodology of Project 681 grew out of that pilot study, and the pilot helped to demonstrate the need for and feasibility of setting up such a project.

A number of other rehabilitation facilities in the Minneapolis area interacted with the developing Project 681. Professional interaction has been two-way, so that the local programs have grown up together and have borrowed freely from each other. Conferences on the technology of prevocational evaluation, to be described later in this report, have facilitated the exchange of information on a state-wide basis. These conferences were set up by the staff of Project 681, with the cooperation of other agencies, particularly that of the Minneapolis Rehabilitation Center and of the prevocational unit of the University Hospitals.

The parents are, as has been noted, in the first line of responsibility for the supervision of a child. The fact that a child is retarded increases rather than decreases the responsibility, since a retarded person has special needs as a child and since he frequently remains somewhat dependent as an adult. This situation is complicated by the sociological correlates of retardation. Because prominent parent groups, such as the associations for retarded children, tend to have highly competent and articulate leadership, the retarded child is often visualized as functioning in an idealized middle-class home. Counter to this is the stereotype of the Kallikak family, with retardation and social incompetence rife over many generations. While direct inheritance of mental deficiency appears not to be the clear major cause of mental retardation, it is nevertheless true that retardation is most common in those sociological settings which make parental responsibility most difficult to discharge. The result is that some parents are much more competent in their supervision of their retarded child than are others, though in all cases the responsibility is primarily that of the parents.

This discussion of agency and parental matters has been somewhat idealized. In practice, there have been many service gaps and discoordinations, and service problems still exist.

With regard to the family, it has already been noted that some families are not able to fulfill their responsibilities, and that a few are not even able to cooperate well with schools and other agencies. Even when an agency makes maximum effort to involve and cooperate with the parents of a retarded youngster, and sets up procedures designed to promote parent contact, a few families are found unwilling or incapable in this regard. There is some evidence that this problem is more common in those sub-populations in which the incidence of retardation is also high.

With regard to the agencies of the community, the limitations on effectiveness are predetermined by the quantity of the service resources. Some services do not exist in sufficient quantity. For example, the sheltered workshops are not large enough to absorb all the potential sheltered employees, and consequently this places a limit upon how effective the service of sheltered employment can be. Likewise, there are waiting lists for some other services, notably for prevocational training. Yet, in comparison to many communities, the Minneapolis area has provided an unusually broad and well-established system of agencies serving the retarded within which Project 681 found its place.

Chapter 5

ORGANIZATION OF THE PROJECT

Funds to assist in conducting a three-year project were requested from the Office of Vocational Rehabilitation in July, 1960. The proposal was approved and authorized for initiation in September, 1960. Because of delays in remodeling space and in filling certain key staff positions, the initial period of operation was extended to February 28, 1962. Continuation grants over two successive years and extension to cover a summer school program in 1964 brought Project 681 to conclusion under Vocational Rehabilitation Administration support at the end of August, 1964.

During this time, the project served over 500 retarded students in its demonstration unit. In addition, it located and interviewed some 400 former special class students who had left school in the three years immediately before the project began. The project also worked with over 200 other students in special studies, such as a study of students with borderline intelligence and a cross-sectional study of all retarded students who were at a ninth grade level in 1962-63.

There was an early recognition of the need for evaluative and descriptive research. Base information was needed on the outcomes of special class students, on school curriculum, and on the characteristics of these students. Some of these aspects of the research in the project were separated from the services of the demonstration unit. However, it was felt that the functions of research and demonstration were on the whole interdependent: that research would not be appropriate without the continued stimulation and leads provided by intensive study of and service to the individual student; also, that these services would not be meaningful beyond the individual case without more objective and comprehensive research.

The project was thus somewhat divided into service and research functions although the two were never totally separated. The primary purpose of the demonstration unit was to demonstrate effective services, and it was developed toward this goal. Part of the research function was to evaluate these services, and part of the research function was addressed to the study of basic problems the project was designed to highlight. Expanded support for these efforts was given by Vocational Rehabilitation Administration after the initial year. This enabled the addition of three more staff members.

The staff hired in the project represented a broad variety of experience and responsibility in both education and rehabilitation. In addition to the project director, who was the consultant for the school system in special education and rehabilitation, the project staff consisted of:

> Two laboratory supervisors - in charge of work laboratories where they evaluated work readiness through job samples and tryouts, provided individual training, and supervised simulated work projects.

Two research workers/psychologists - who did psychological studies, who took part in developing and evaluating operations and procedures, and who conducted evaluative and survey research.

A special teacher - who worked in a classroom with group work, group testing, and the development of realistic, vocationally-related curriculum.

A work coordinator - who placed students on jobs in the community, supervised and evaluated them at work, and conducted a general job orientation and guidance session with all students in the project once a day.

A unit worker - who did intake and transmitted information within the unit and who provided personal and family counseling through interviews and interpretation to parents, schools, and agencies.

A project coordinator - who supervised the program and was responsible to the project director for coordinating and carrying out both the research and the service aspects.

In addition to the project staff, other members of the school system were available on a consulting basis, and psychologists from the Child Study Department were able to provide some services. Also, all students who entered the demonstration unit were referred to the Minneapolis Schools' Branch Office of the Minnesota Division of Vocational Rehabilitation to be assigned a counselor.

The Service Demonstration Unit

The demonstration unit of the project was set up to provide an in-school facility for prevocational evaluation, planning and training. It was felt that such a service could aid education by developing better means for the schools to assess the work/training potential of the retarded they were educating, and at the same time aid rehabilitation through more effective utilization of school resources.

Space was made available and remodeled at one of the centrally located senior high schools (Minneapolis Central High School) for a unit consisting of two work laboratories, a classroom, and a small office (additional research office space was procured in the school administration building). Later, an additional classroom was added to provide more adequate office, interviewing and testing space.

The unit was able to handle up to forty students at one time. They were usually divided into three groups for scheduling to the classroom and the two work laboratories. One of the laboratories was concentrated in the mechanical-manipulative area and the other was focused on service-clerical work. All of the students spent time in all three rooms, at least during their period of initial evaluation, and there was no separation of boys and girls. Typically, at a given time, about ten students would be in the unit for initial evaluation and the others, who had been through the initial evaluation period, would be continuing in the unit for work experience/ training. Several other students would be out on jobs under the unit's supervision but not coming in for regular attendance.

Students were referred to the unit when they were considered by their school counselors and teachers as ready or about to leave school. They were usually of age sixteen to twenty-one, although some younger (ages fourteen and fifteen) students were occasionally seen because it was felt they needed intensive evaluation for planning, or because they were applicants for the special program at the Vocational and Technical High School and were seen in connection with the project's study of that program. Eligible out-of-school retardates (under twenty-one and residents of Minneapolis) were referred through the vocational rehabilitation counselors.

All referrals to the unit were accepted for evaluation and planning. No pre-screening or selection methods were used and efforts were made to attempt to serve all referred.

As openings became available, the unit worker did initial interviews with the students and with the parents. The student than came into the unit for at least two weeks of initial evaluation consisting of group observation and testing, tryouts in the work laboratories, psychological study, review of school and Division of Vocational Rehabilitation information and as much other information as could be obtained.

If the student was attending some other school program, arrangements were made by the unit worker with that school for him to come to the project's unit during this period of evaluation without loss of credit. If the student was not in school at the time he entered the unit, he was re-enrolled and could, therefore, be transferred to some other public school program if, after evaluation, this was recommended.

Emphasis in evaluation was on whole-person characteristics rather than on single traits. Orientation of the staff was on assessment of the student's situation and needs rather than on whether or not he would fit into the project's established training program.

At the end of the initial evaluation period a case staffing was held and was often attended by members of other agencies involved such as welfare and social workers. A representative of the Minneapolis Association for Retarded Children and a DVR counselor were usually present. Results of the observations, tests and job tryouts were presented and discussed. A free exchange of opinion was promoted. As a result, recommendations were reached such as:

Continuance in the unit for work experience/training
Return or entry into some other school program
Immediate placement
Referral to community resource

Results, with recommendations, were interpreted to the student and to the parents. The parents' reaction and direction was sought, as their help in planning had been sought at the time of initial contact.

Students who continued in the unit received an individualized program of job preparation, training and tryout placement in competitive jobs. Training in practice overlapped guidance because the students learned more from the interpretation of their performance in actual situations than from formal test results or verbal counseling alone.

New students, oriented from a home economics class or an industrial arts shop, sometimes entered the work laboratories and asked what projects they would be making but soon learned that concern would be with such things as what tools and machines they could use, what common food preparations they were familiar with, could they sort and stack dishes, bus trays, operate a dishwasher, buff floors, use a washing machine, iron clothes, make beds, set up hospital food trays, sort mail, assemble pages, wrap packages, answer a telephone and take a message, stock shelves, keep a record tally, sort bolts, disassemble and assemble a mechanism, use measurements to prepare materials, learn to operate a metal shear, power saws, a spot welder, follow one-step, two-step or written instructions, truck heavy materials, tell time and be aware of it, make change, weigh things, sort things, and for how long could they persist on a job.

Counseling was both verbal and situational by direct experience, group interactions and environmental manipulations which gave the student opportunity to test reality by working through concrete situations. Free feedback of reaction from peers and staff was encouraged. Models of reactive and supervisory action were charted which attempted to reinforce desired behavior patterns.

Most students in the unit were placed on competitive jobs in the community for an actual work tryout. These placements were viewed as work experience and training. They were different from those of a usual school work-study program in that the unit student went to a job that was used as an evaluation and training tool of his in-school program. This program, in turn, was entirely vocationally centered and he spent all of his in-school day in it. Students in the project unit came from all districts of the city. They did not transfer to Central High School but directly to the project. The project unit was located in Central but was not part of its program. Students from Central High School special classes who were referred to the project were treated as students from any other Minneapolis school and were transferred from Central to Project 681. The project maintained the student files and records and was directly responsible to the school system administration for such matters as attendance, enrollment, and financial budgeting of the operation. The project unit operated as an independent school facility modeled, in operational function, after rehabilitation facilities.

Students who, after initial evaluation were judged unready for vocational training and who were returned or entered some other school program, were expected to be re-referrals at a later time and their school progress was followed. In all cases, recommendations had been made to the receiving schools.

Students who left for immediate jobs or referral to community resources were contacted regularly to determine their status and follow-through on plans. Many of them returned to the unit for additional evaluation or aid.

All students who received any service from the unit were regularly followed at least once per year (most of them were seen far more often) in late June and early July when a systematic yearly follow-up was made of all cases.

The Evaluative Research Function

Project 681 involved a program of studies which moved along with and grew out of continuing efforts to improve service provisions. More data were collected and analyzed than could be described in detail in this report. We have, therefore, limited this report to selective description of the total range of activities carried on as part of the Project 681 inquiry. Various studies, reproduced in mimeographed form, are listed in Appendix 1.

Research functions of the project were begun with a comprehensive follow-up study of former students. An attempt was made to contact the entire population of the Minneapolis Public Schools' educable special class students who graduated or terminated their education from 1957 to 1960. Personal interviews were conducted with 91% or 385 of the 423 former students (and/or parents). Findings are presented in Chapter 6 of this report.

Working with the Minneapolis Vocational High School and Technical Institute, the project did systematic study of the program offered there for retarded students. This program was in existence since 1946 (as described previously in this report), and it served many of the special class students who later showed the most adequate vocational adjustment. However, in recent years, fewer and fewer special class students were able to gain entry or compete successfully in the trade offerings of Vocational High School. A summary of the studies of this program and its evaluation is presented in Chapter 7 of this report.

The Vocational High School studies and the question of selection for special programs, as well as for special class placement itself, led to an investigation of IQ scores and relationships. A discussion of this investigation dealing with testing patterns in the school system, reliability scores, and relationships to achievement and employment outcomes is presented in Chapter 8 of this report.

This study in turn led to efforts to attempt to determine identifying characteristics of special class students other than IQ or lack of intellectual power. A sample of seventy special class students in the upper intellectual range (IQ over 77) was studied intensively. Contrast samples of low-IQ special class students and of regular class students in the same geographic neighborhoods were also studied. Using this as a pilot of methodology, the entire 1962-63 ninth grade special class population was studied - a total of 138 students. Results from both studies showed that special class placement was related to a number of sociological variables and that study of these factors was necessary to an adequate understanding of the student. Details of these studies and findings are presented in Chapter 9.

Chapter 10 summarizes descriptive and attitudinal information obtained from interviews with students referred to the project for services. These interviews were recorded on a standardized intake interview form, and a parallel form was used to record the parent interviews. These forms were developed to systematically cover several areas of information and to obtain comparable information from students and parents.

Chapter 11, the final chapter in the following section of this report, attempts to define the special class population and discusses problems in classification and diagnosis. Research results dealing with the evaluation of the project's services are presented in the later sections of this report.

PART II: THE RESEARCH SUB-STUDIES OF THE PROJECT

Introduction

Special education and rehabilitation of educable mentally retarded youth is a set of programs designed around the characteristics and needs of retarded youth. This statement is partly a truism and partly an assumption.

The characteristics of retarded people are implicitly assumed to be known, and are usually assumed to derive from their being retarded. Since retardation, as a label, is subject to so many conflicting definitions, since the interests of various movements are served by definitions which vary with the public goal to be served, since the professions concerned with retardation are now so long established as to be somewhat vested in their assumptions, and since retardation actually comes into evidence only when seen against the changing and situation-specific background provided by society's requirements for normality, it seemed necessary to re-study the characteristics and needs of people who are retarded.

Some definition of mental retardation is necessary in order to even begin this re-study, however. At the time that Project 681 began its re-study, extant definitions of mental retardation were in flux. The substantive and etiological definitions, and even those definitions which referred to a single behavioral criterion such as educability, had been shown to have an impractical proportion of exceptions. Pending the development and acceptance of more adequate definitions, the re-study was begun using the definition that "a person is mentally retarded if he functions in a retarded manner because of inadequacies which seem to be mostly intellectual," a definition operationally equivalent to placement in special class for the retarded. A more elegant and general formulation of this kind of definition may be quoted from the preliminary report of a VRA-sponsored conference held in Wisconsin in November, 1964. That report stated, in part, "Mental retardation can be described simply as an inadequacy of general intellectual functioning which has existed from birth or childhood.. .and it is the deficiency in adaptive behavior, not a sub-average test score, which draws society's attention to an individual and creates a need for social or legal action on his behalf... What constitutes a meaningful impairment in adaptive behavior varies as a function of the age of the individual...about 80-90% of all mental retardates do not present obvious gross pathology of the central nervous system... The great proportion of this group, however, are persons who appear quite normal in the physical sense but who function as mentally retarded." The same report also refers to "those retarded who demonstrate mild or moderate impairments in adaptive behavior and who generally come from adverse environments in which they have learned to be defeated, unmotivated, and hostile."

When a population re-study is in order, the working definition of that population cannot be expected to describe causes, characteristics, needs, and helpful courses of action. That description is the function of the re-study. The purpose of the definition is rather to delineate the boundaries of the population to be studied. The description then derives from the findings.

In the individual case, there is seldom much question as to whether a given person ought to be considered retarded, though it is frequently evident that a given retarded individual does not meet the stereotype of "the retarded." This has not created much of a problem in the practical management of retarded people, but only because society has a very limited number of management options; if all retarded people of a given broad ability level are to be managed in a single standard way (such as assignment to a standard kind of special class), then discrepancy with the stereotype can be disregarded as not implying a modification of the standard management method. It is only if society decides to come to grips with an individual's actual problems, and intends to furnish differential courses of action to deal with those problems, that the difference between the stereotype and the individual reality becomes important.

Society has now made its commitment to many programs of prevention, alleviation, remedial management, circumvention, and rehabilitation in the field of mental retardation. Programs of public education, planning councils, and service agency funding have been set up on unprecedented scale. Such massive investment of societal effort demands a rational and reality-based allocation of effort, an allocation which can best come from an understanding which goes beyond the time-worn stereotype. In turn, this understanding requires a return to the examination of the data base.

Of course, the data base is largely specific to the situation. For example, the population of a custodial institution is generally quite unlike the population of a public school special education program. This is because retardation comes into view only against a set of defining criteria (the areas in which the individual's functioning is inadequate), and those criteria select the particular population. One consequence of this population specificity is that much of what is asserted about "the retarded" is the extrapolation of observations made on a single specific group. The many extrapolations are frequently contradictory.

As for the present report, it frankly deals with yet another specific population. It may be fairly asserted that it deals with a very broad population, since the public schools deal with all of the kinds of retarded people except those who are placed in custodial institutions and a very few who are able to live in the community but who are not able to attend school. With these cautions, the population which concerned Project 681 can be defined as "those youth who function in a retarded manner in relation to the multifaceted criterion of adequacy in a large public school system, and who are considered to be mentally retarded on the basis of an individual psycho-social-educational diagnosis." In comparison with other definitions of "the retarded," this definition encompasses the largest number of mentally retarded people, since profoundly retarded people are relatively rare and the clinical types are in the minority among the retarded.

This rather lengthy and involved definition is necessary in order that there may be no question as to whether the population under discussion is retarded. Society has been long accustomed to "knowing" what retarded people are like, and a finding contrary to the stereotype is likely to arouse resistance to the idea that the population being studied is really retarded. The population reported here had been initially diagnosed in a normally responsible way, and was then later studied to find out what such people are actually like, with some consequent violence to the a priori stereotype.

Several studies were carried out by Project 681. They all bear upon the characteristics of the mentally retarded, and were designed to view these characteristics from different viewpoints. Each study was extensive enough to warrant a separate report, though these reports exist at this time only in a few copies. The succeeding chapters deal with the studies and their findings. For reading convenience, each study is described separately in this report and synthesized in Chapter 11 as an on-balance description of the special class population.

Chapter 6

FOLLOW-UP STUDY OF FORMER SPECIAL CLASS STUDENTS

Program evaluation aspects of Project 681 included a follow-up study on a sample of former special class students who had already completed or left school. The purpose of this investigation was to obtain certain baseline data to be used in assessing various influences on adult adjustment outcomes.

Subjects involved in the follow-up study were all former Minneapolis secondary special class pupils who had left school for any reason except transfer to another school district during or at the end of the school years 1957-58, 1958-59, and 1959-60. The period covered was, then, from September, 1957, to June, 1960. Age range at the time of follow-up contact was sixteen to twenty-four, with the average former student being twenty years old.

Intensive effort was made to locate and interview all 423 pupils who had left or graduated from the special education program during the period defined. Telephone directories were scanned, the city directory searched, and leads from neighbors and former associates pursued. The County Welfare Department cooperated in providing the most recent addresses of those who were receiving welfare benefits. The State Department of Welfare and the Department of Corrections made their records available. As interviews progressed, remaining members of the total defined population became harder and harder to locate. Some subjects were found and interviewed in state institutions and prisons. Through these efforts, 383, or 91% of the total possible population of 423, were located and interviewed. A comparison of known data on the 9% who were not located with comparable data on the 91% who were found revealed no significant difference between the two groups in age, sex or IQ factors. Information gleaned in trying to locate the unavailable 9% suggested that they probably tended toward poor adult adjustment outcomes. In almost all cases there was no definite indication that they had left the Minneapolis area. In fact, many of them had relatively recent welfare or police records ending with no current address.

School cumulative records were reviewed to obtain school achievement and behavior histories, family background and health information, intelligence test scores, and any other pertinent recorded data. Records of the Division of Vocational Rehabilitation were combed. Information secured from these sources were recorded on a summary data sheet (see Appendix 2: Follow-up Information Sheet"). Records of the Minneapolis Polic Department, the Crime Prevention Bureau and the Bureau of Identification were searched to determine the crime involvement of these former students.

Most of the interviews were conducted by professional members of the project staff. Some assistance in locating and interviewing subjects was given by five volunteers from the Minneapolis Association for Retarded Children. These volunteers were selected for the task by the program director of the Association. All were college graduates. They were given brief training in interviewing techniques and in use of the interview form.

An interview recording form (see Appendix 2 "Follow-up Questionnaire") was developed to insure uniform coverage of the areas of inquiry. These areas included: reasons for leaving school, work history since leaving school, present employment status, recalled school experience and attitudes about school, marital and financial status, health status, and certain specific personal information such as automobile ownership, newspaper reading, TV viewing, and future plans.

The interviewer presented a card which identified him as a person authorized to represent the Minneapolis Public Schools. Interviews were generally conducted in the home though, as indicated, some were conducted wherever the student could be reached. The interview form contained a set of opening instructions which were to be used for introductory purposes. A rating of subject cooperativeness was made by the interviewer.

Descriptive Characteristics of the Population

Intelligence and school achievement. All subjects interviewed had come from Minneapolis special classes for the retarded and had been diagnosed, educationally classified and placed in special classes by the school system under standards established by the State Department of Education. All of them had at least one individual IQ score below 80. The average Binet Scale score for the entire group was 73; the average Wechsler Full Scale score 76. The average reading achievement level, employing the most recent test or teacher rating, was at the fourth grade level. It will be noted that this group does not seem to be significantly different in these respects from the present special class population of this school system.

The average age of entering special class was twelve years. Members of this group had spent 48% of their school careers in special classes. They were, on the average, one or two years behind their age mates in grade placement. Most of them had spent twelve years in school in contrast to thirteen years of attendance (kindergarten through grade twelve) for the typical regular class student. Their average age at the time of leaving school was seventeen years. Only 35% of them completed a three-year high school program though such was available; 65% had dropped out before "graduation." Two percent of the "dropouts" later returned to an adult education program or to day school and obtained a diploma by this means.

Social characteristics. Residences of these students were plotted. At the time of interview, 49% were living in areas of the city which have high rates of delinquency and social disadvantagement. This is slightly lower than the rate of residence in deprived areas seen in the "ninth grade study" sample. Seventeen percent of the located former students were non-white. This compares with a 3% rate in the general Minneapolis population. Within the city, residence patterns of non-white minorities are related to socio-economic factors.

Occupations of the fathers of the 423 former students (as reported on school records) presented a picture significantly different from the occupational distribution of Minneapolis males in general. It is apparent from Table 4 that a disproportionate number of these subjects come from homes where fathers worked in unskilled or semi-skilled occupations. Few of the fathers of these former students were employed in professional, managerial, clerical and sales occupations compared to the prevalence of males in such occupations in Minneapolis.

Table 4

Socio-Economic Background

N-423

Occupational Group	Occupations of Fathers of Special Class Students	Occupations of Minneapolis Males
Professional and Managerial	2%	23%
Clerical and Sales	6%	19%
Service	8%	8%
Agriculture	2%	-
Skilled	18%	19%
Semi-skilled	35%	18%
Unskilled	18%	7%
Unemployed or Unknown	11%	6%
	100%	100%

(Data from school records giving parental occupation at the time the pupil was attending school.)

Interview Results

The post high school vocational, marital and crime history was reviewed on all the subjects located to determine the number of subjects who would be considered successful by ordinary standards. One might expect a successful young adult to be employed full time, to have had a job three-fourths of the time since he left school, to have had no more than three jobs in two years or four jobs in three years, to be earning more than $40.00 per week, to be able to financially support himself, to have shown a stable marital history, and to have not been involved in any serious crime as an adult. A married woman would be judged successful if she had not been divorced or separated, was not living with her parents or in-laws, was self-sufficient (no welfare assistance), and had not been involved in any crime. By these criteria, the review showed that 98 subjects, or 23% of the population, might be judged to be successful young adults.

Factors related to vocational success. Subjects were classified into three groups according to their vocational adjustment: a very successful group, a very unsuccessful group, and an intermediate group. Boys classified as very successful were those who earned $61+ per week, had held their present job more than three months, and stated that they liked their jobs. This group included 38 subjects. The very successful girls were those earning $40+ per week, who had held their present job more than three months and who liked their jobs. Also included were housewives in fully self-supporting families who owned a home. This group included a total of 27 girls. The very unsuccessful boys were either institutionalized, had never had a job or were unemployed when contacted and not looking for work. This group totaled 48 subjects. A total of 29 very unsuccessful girls were picked on a similar basis. The intermediate group included 163 male subjects and 78 female subjects. There were a total of 65 very successful former students, 241 intermediate, and 77 very unsuccessful subjects.

A series of chi-square tests were run to see if these groups differed in measured individual intelligence, school achievement, socio-economic correlates, patterns of school and special class enrollment, attitudes towards school, crime, health and the presence of multiple handicaps according to the Division of Vocational Rehabilitation diagnosis.

Analysis indicated that the groups differed on the following dimensions: Wechsler Performance IQ, race, high school graduation and related indices, length of time out of school, age of interview, expressed satisfaction with school, desire to get further training, juvenile delinquency and the presence of multiple disabilities. Binet IQ, Wechsler Verbal IQ, reading ability, father's occupation, percent of time in special class, school likes and dislikes did not differentiate the three vocational outcome groups.

Very successful subjects had higher Wechsler Performance IQ's, had stayed in high school longer, had been out of school longer, had been older when interviewed and more often expressed satisfaction with their schooling. The very unsuccessful were more often non-white, had left school at an earlier age, were involved in more juvenile delinquency, had more multiple handicaps, and expressed more anxiety about getting further training.

Employment status. Employment status of subjects at the time of interview is summarized in Table 5. Roughly half of these former students were in full-time employment, in the armed services, or were housewives. The status of one-sixth of them was marginal, that is, in part-time, irregular work, sheltered work or in training. The remaining one-third were in extreme dependency status, with unemployment, penal incarceration, day care and institutionalization predominant. It is noteworthy that only 2% were institutionalized.

Table 5

Employment Status of Former Special Class Students

N = 423

	Number	Percent	Adjustment
Full-time employment	148	35%	Good
In armed services	16	3	Good
Housewife	40	9	Good
Part-time employment	22	5	Marginal
Irregular employment	10	2	Marginal
Sheltered employment	18	4	Marginal
In training	8	2	Marginal
Unemployed	104	25	Poor
Penal incarceration	7	2	Poor
Institutionalized	7	2	Poor
Day care - social development	1	1	Poor
Deceased	2	1	
Unable to locate	40	9	
	423	100	

Although the unemployment rate of former special class students is considerably higher than that of youths in general, it does not differ greatly from that of youth from the same general neighborhoods. The Minneapolis "Youth Development Project," a research and demonstration program, developed similar statistics on Minneapolis juvenile delinquents, underprivileged and culturally deprived youngsters. An extensive survey was conducted in a census tract in Minneapolis where low socio-economic conditions prevail (Youth Development Project Report, 1963, Table 10). This survey revealed that 37% of the boys and 29% of the girls in this census tract were unemployed and not in school.

Table 6

Employment of Former Special Class Male Students

(Roe Occupational Classification)

Boys N=136

Area		Level of Responsibility						
		1	2	3	4	5	6	Total
I	Service	--	--	--	--	9%	27%	36%
II	Business contact	--	--	--	--	2%	--	2%
III	Business administration & control	--	--	--	1%	3%	6%	10%
IV	Technology	--	--	--	4%	25%	20%	49%
V	Outdoor	--	--	--	--	--	1%	1%
VI	Science	--	--	--	1%	--	--	1%
VII	Cultural	--	--	--	--	--	--	--
VIII	Arts & entertainment	--	--	--	--	1%	--	1%
	Total level	--	--	--	6%	40%	54%	100%

Table 6 summarizes the Roe Classification (Maser, et al, 1956) of jobs held by former special class boys at the time that they were contacted. Roe's system involves classifying each job according to area or kind of occupation and the level of responsibility involved.

The majority of these students held jobs in service and technology areas at the semi-skilled and unskilled levels. Kitchen help, machine operators, and laborers comprised 73% of the jobs held by boys. Kitchen help, waitresses, machine operators and unskilled factory workers accounted for 92% of the jobs held by girls.

Of those holding a job at the time of contact 25% had been on the particular job three months or less, 35% from four to twelve months, and 40% longer than a year. When asked how they felt about their jobs, about half of the subjects expressed satisfaction in their work, one-fourth expressed indifference and the remaining one-fourth voiced active dissatisfaction with their jobs.

Many of these former students had quit or had been fired from jobs. An analysis of their stated reasons for leaving jobs was attempted. If a person left a job to move to a better-paying, steadier, more highly skilled, or more prestigious job, this was considered a "good" reason. If a person was fired, quit because he couldn't handle the work or had too many arguments with his boss or fellow employees, his reason for leaving was classified as "poor." If the person left to get married or was laid off because of lack of business or because of poor health, the reason was rated as "neutral."

One hundred ninety six job termination reasons were classified according to these criteria. "Good" reasons were involved in 25% of the terminations, "poor" reasons in another 25%, and "neutral" reasons advanced in half of the job terminations.

The avenues most often used to find employment were friends, relatives and direct application to employers. The State Employment Agency was rarely reported as helpful by the students. Unions and private employment agencies were seldom used.

Financial status. The average take-home pay reported by the employed subjects was $40.00 per week. Boys earned more than girls and had a greater range in the wages earned. If one were to assume that in the Minneapolis community a boy would need $61.00 a week and a girl $41.00 a week to live independently, one-third of the employed boys and one-half of the employed girls had sufficient income to live independently. Only one-fourth of these former students were living independently - renting, in homes of their own, or in military housing. Three-fourths were living at home, with relatives, or were in institutions.

Money management practices were explored. About 40% of the subjects said that they had savings accounts. However, the amounts saved were relatively small, ranging under $100. Only 7% had checking accounts and 15% had acquired charge accounts.

One-third of the subjects stated that they owned automobiles. Median age of the automobiles owned was five years.

Health status. Almost all subjects (91%) described their general health as good. Twenty-seven percent had been hospitalized since leaving school. Many of the hospitalizations were in connection with childbirth. Thirteen percent of the students reported having been involved in injuries or accidents since leaving school.

Marital status. One-sixth of the boys were married and 40% of the girls were married. For girls, the minimum age for marriage in Minnesota with and without parental permission is sixteen and eighteen years respectively. The minimum for boys is eighteen and twenty-one respectively. Since the average age at interview was 19.7 years, many of the boys could not have gotten married without parental permission. Of the girls who were married, 20% had married before the age of eighteen.

Attitudes toward school. Various questions were asked to elicit subject reactions toward school experience. Surprisingly, 25% of the students felt that school people had explicitly asked them to leave before they had finished their education or wished to leave. Others (20%) expressed the wish that they might have remained in school longer but reported that they had found school intolerable and quit.

Students were asked what they liked or disliked about school. Academic subjects, industrial arts and home economics were mentioned most frequently as liked aspects of the school program. On the other hand, academic subjects, along with school personnel, were also often designated as being among the most disliked aspects of school. In evaluating responses, it was obvious that many of the students reflected little real involvement with school except as a place for making social contacts. Others were evasive and unable or unwilling to be candid about their school experiences. Most of the students felt that if they had stayed in school longer and had had more help in academic subjects their employment outcomes would have been better.

The teacher was named as the person who helped the student most while in school. Counselors, visiting teachers, and other school staff were infrequently named as "most helpful." Many students felt that no one gave them help while in school. When asked what person might be turned to for help with questions about jobs or work, school counselors were most frequently mentioned. Forty-eight percent of these students indicated interest in having help in finding a job. Of those who expressed interest in getting help, the whole range of intensity of feeling from nonchalance to desperation was evident.

All students were asked if they had plans for further education or training. Over one-third responded affirmatively. Their most typical aspiration was to finish school or go to a trade school. As might be expected, girls were not as concerned about further educational goals as the boys were. Many of these students who talked about various training facilities were unqualified to enter them and others had not made any real effort to seek out the training they professed to want.

Table 7

Plans for Further Training and Education

Kind of Further Training Desired	Boys %=N/125	Girls %=N/43	All %=N/168
High school diploma	30%	38%	31%
Correspondence courses	2%	2%	2%
Armed forces trade training	18%	2%	15%
Business college	--	7%	2%
University - general college	2%	7%	4%
Trade school	37%	9%	30%
Barber - beauty school	1%	12%	4%
Art and music schools	3%	2%	3%
Nursing (aide, LPN, Red Cross)	1%	12%	4%
Training in an institution	2%	2%	2%
Day care - social development	--	2%	1%
Sheltered workshop and Project 681 training	2%	--	1%
Training programs by private enterprise	2%	5%	1%
	100%	100%	100%

Leisure time activities. Turning to avocational pursuits, one is struck by the differences in tendencies. A great many former students reported little leisure-time activity except indiscriminate TV viewing, while others reported participation in a wide variety of leisure activities. Activities involving socializing with others were most frequently mentioned. Puttering with and repairing cars, TV sets and radios were popular activities. Going to sports events and movies were popular recreations. Woodworking, crafts, hunting, fishing, sewing, embroidering, playing musical instruments, gardening, painting, acting, ham radio, participation in church and organizations were all reported. Many of the housewives with babies and heavy household responsibilities claimed they had no time for leisure activities.

Rehabilitation agency activity and outcomes. The Branch Office of the Division of Vocational Rehabilitation, located in the central administration building of the Minneapolis Schools, had records on 49% of the former students in the follow-up study. Fourteen percent of these students had been rejected as "not eligible." Another 5% were still in referral status. Records of another 32% of those on file indicated no personal contact with the rehabilitation counselor in terms of interviews, letters or phone calls. Another 29% of those who had Division of Vocational Rehabilitation records had been enrolled in the special education program at Vocational High School and, as a consequence of the criteria of intake for that program, could be expected to be a highly select group of the more able special class pupils.

Of all cases on the Rehabilitation agency roles, 56% had received what was classified as routine evaluation, counseling, and placement services. Only 9% had received active job placement service.

Analysis of outcome data on the total group of former students revealed no significant relationship between vocational adjustment and being registered or not registered with the Division of Vocational Rehabilitation. Among those served by the Vocational Rehabilitation agency, records indicated that the Vocational Rehabilitation counselor had the greatest amount of contact with the very successful subjects and least amount of contact with the most unsuccessful subjects. Amount of contact was judged by the number of interviews, phone calls and letters exchanged with the subject, his parents and others involved in the rehabilitation services. Only 35% of the very unsuccessful subjects had been interviewed by the Vocational Rehabilitation counselor as compared to 57% of the intermediate subjects and 91% of the very successful subjects. It is possible to conclude either that attention from the rehabilitation counselor heavily influenced vocational success or that counselors were successful in identifying and giving greatest attention to subjects having the greatest likelihood of success.

A possible relationship between changes of counselor and vocational adjustment was explored. Fifty percent of the very unsuccessful subjects had a change of DVR counselor during their period of service as compared to 41% for the intermediate and only 30% of the very successful group of subjects.

At the time that the records of the Vocational Rehabilitation agency were searched, it was found that 30% of those referred were in an active status. Since there were DVR files on 49% of the total population under study, it would indicate that 14% of these former students were in an active status (Plan Development, Counseling, Physical Restoration, Training, Placement, and so forth) at the time the records were surveyed.

The relationship between the Vocational Rehabilitation status and the employment status when contacted was studied. Of those closed by the Division of Vocational Rehabilitation as rehabilitated, 79% were in full-time employment, in the armed forces, or were housewives. Of those rejected for service, 56% were in one of the satisfactory employment categories mentioned above. There were too few people in a closed but not rehabilitated status to develop reliable statistics. The main conclusion from this study would be that the large majority of the subjects closed as rehabilitated in employment were found to have remained in full-time employment or had achieved other desirable adult outcomes.

Adult outcomes of former Vocational High School students. Ninety-two percent of the subjects who had been enrolled in trade training at Vocational High School were registered as clients of the Division of Vocational Rehabilitation. These subjects who had attended Vocational High School comprised 29% of the total number registered with the Vocational Rehabilitation agency.

During the period that these subjects were enrolled, candidates for trade training at Vocational High School were picked by a psychologist working with the rehabilitation office. All "ninth grade" candidates were given the Wechsler Intelligence Scale. Those students who showed performance IQ scores in the "normal" range (usually above 90 IQ) were referred to the Vocational High School program. Survival of special class students in this program was studied.

Only 32% of those who entered trade training completed the three-year program. (These results are identical with the results, reported in Chapter 7, of a study of special class students more recently enrolled in the program.) About 8% of the students who had been accepted for the training in the spring did not report for enrollment in the fall. This would suggest that about one-fourth of the students selected to take the training actually entered and completed the three-year program. Of those who completed the program, two-thirds were working full time when contacted for a follow-up interview, suggesting that 16% of the subjects selected for the Vocational High School program entered it, completed it and became employed.

Of the students who graduated from the program, three-fourths held jobs related to their trade training. Considering the dropout rate from the program, this would mean that only 12% of those accepted for trade training graduated and worked full time in a job related to their training.

Of the students who completed only two years of the training, two-thirds held full-time jobs at the time of the follow-up interview. This is the same rate as that of students who graduated. However, only 50% of those who dropped out in the first year had full-time jobs.

There was a significant difference in outcome status of those students who had been enrolled in trade training at Vocational High School versus those who had never attended Vocational High School. This difference, however, may be more reflective of selection criteria than of the behavior-modifying qualities of the curriculum.

Crime and delinquency records. Records of the Minneapolis Police Department's Crime Prevention Bureau and Bureau of Identification were searched for evidences of the criminal involvement of the 423 subjects of the follow-up study. The Crime Prevention Bureau maintains juvenile records, the Bureau of Identification the records of violators over eighteen years of age. Records of suburban police departments and state law enforcement agencies might have been checked, but this possibility was abandoned because of time demands. However, it is noteworthy that subjects were found in penal institutions who had no Minneapolis Police Department records.

The seriousness of each subject's involvement in juvenile delinquency (under eighteen years) was classified according to the system developed by Hathaway and Monachesi (1953, p.109-110). For purposes of our analysis, Levels I and II of the Hathaway-Monachesi system were combined into one category designated herein as "serious crime involvement." This level of activity includes those cases who have committed one or more of such offenses as auto theft, burglary, grand larceny, armed robbery, and gross immoral conduct (girls). These acts may have been supplemented by less serious offenses, but the classification is based on the crime with which the subject was charged. Persons in this category would be regarded as having developed a rather well-established pattern of delinquent behavior.

Hathaway and Monachesi's Level III is identical with what has been designated as "minor crime involvement" in this study. This category includes minor offenses such as destruction of property, drinking, one or more moving traffic offenses, curfew violations, and so forth. Subjects so classified would be considered less seriously anti-social than those falling within the serious criminal behavior category. However, as a group, they would have given disquieting evidence of undesirable conduct.

The "no crime" category would indicate that there was no Minneapolis police record nor was the subject incarcerated at the time of the follow-up contact.

Adult crime categories paralleled the juvenile crime classifications. By definition, adult crime statistics can include only subjects over the age of nineteen.

The "serious adult crime" classification would indicate commission of felonies or gross misdemeanors. Incarceration in federal, state or county institutions and/or payment of heavy fines would be typical court actions in such cases. Again, in these cases a more or less well-established pattern of criminal behavior could be seen.

The "minor adult crime" category includes those who had committed misdemeanors, had gotten moving traffic tickets or were investigated only. Parking tickets were not classified as crime involvement. Behavior in this category would appear as "nuisance" or "irregular" behavior to law enforcement agencies.

The "no adult crime" category would indicate no record and no incarceration at the time of follow-up.

The extent of the juvenile delinquency and adult crime involvement of the 423 subjects is summarized in Tables 8 and 9 below.

Table 8

Juvenile Crime Involvement

	M %	F %	Total %
Serious Crime	38	15	30
Minor Crime	19	9	15
No Crime	43	76	55

Table 9

Adult Crime Involvement

	M %	F %	Total %
Serious Crime	11	2	8
Minor Crime	31	14	25
No Crime	58	84	67

To better interpret these results, the crime involvement of these subjects may be compared with Hathaway and Monachesi's study of Minneapolis adolescents (1963, Table 7). These investigators found that 37.2% of Minneapolis boys had some police record by the time they had reached their eighteenth birthdays. Fifty-seven percent of the former special class boys had police records involving either serious or minor crime by the age of eighteen. Hathaway and Monachesi found a delinquency rate of 11.3% by age eighteen among the general population of Minneapolis girls. This compares with the 24% found among the former special class girls. These differences indicate that former special class students became involved in significantly more delinquent behavior than the general population of Minneapolis adolescents.

The rate of recidivism among these subjects was over 60%. One subject had been arrested seventeen times. The number of arrests does not give a complete picture of the extent of involvement, however. When a subject was arrested, it was often the end result of a number of violations. An extreme example is the boy who was arrested once on a charge of twelve car thefts and a burglary. One girl, credited with one arrest for "gross immoral conduct," had been meeting boys in a trailer house on a house trailer sales lot for months.

The relationship between juvenile and adult crime was studied. Juvenile crime might be of less concern if it does not progress into adult crime.

Table 10 summarizes the relationship between patterns of juvenile and adult crime in this group.

Table 10

Relation of Juvenile to Adult Crime Records

	Serious Adult Record	Minor Adult Record	No Adult Record
Serious juvenile record	22%	49%	29%
Minor juvenile record	9%	44%	47%
No juvenile record	3%	10%	87%

The subject with no juvenile record is less likely to establish a criminal record as an adult. A record of serious delinquency as a juvenile is associated with having an adult police record though the offense is more likely to be minor.

Socio-economic correlates are fruitful areas for exploration in relation to the criminal behavior of this group. Male subjects whose fathers work in unskilled occupations or were unemployed showed much more serious crime involvement both as juveniles and adults. This was, however, not true for the female subjects where no particular interaction was found between crime and father's occupation.

Male subjects from lower socio-economic origins showed much more serious crime involvement as juveniles. Again, in plotting residence at junior high school age, it was found that the male subjects with bad juvenile crime records come from areas of the city which were preponderantly of low socio-economic status. This was not true of the male subjects at the adult level or of the female subjects at either period of life. Non-white subjects of both sexes were involved in considerably more serious crime than white subjects were. IQ and reading achievement scores did not differentiate among the groups selected according to crime involvement.

The relationship between age at entrance into special class and criminality was investigated. Age of entry into special class showed no relation to later crime outcomes nor did the proportion of the subject's school career spent in special class. However, male subjects who left high school later were considerably less involved in crime than those subjects who left school early. Male high school graduates showed much less serious crime involvement than did dropouts during both their juvenile and adult periods of life. Female subjects did not show such a clear-cut relationship. Fewer male subjects who had serious crime records as juveniles or as adults expressed satisfaction with their schooling; those with no adult or no juvenile crime record viewed school more favorably. Female subjects showed no such relationship.

Summary and Conclusions

The report summarizes a follow-up study of all Minneapolis Public Schools educable retarded special class students who graduated or terminated their education in the period from September, 1957, to July, 1960. This population consisted of 423 former students. Personal interviews were conducted with 383 (91%) of them (and/or their parents).

The population comprised about two-thirds males and one-sixth non-white students. These subjects had spent less than half of their school careers in special class. When measured by verbal intelligence tests they tended to test below an IQ of 80. The majority of the students were not able to read beyond the fourth grade level. These students came from economically poor backgrounds and lived in areas of the city where juvenile delinquency rates were high.

Almost half of the subjects were holding full-time jobs, were in the armed forces, or were housewives at the time of being interviewed. However, only 23% could be rated as successful when multiple factors such as vocational and marital stability, level of wages earned, independence and crime record are considered. Almost all of the employed were working in unskilled or semi-skilled jobs. Kitchen help, machine operators, and laborers made up 73% of the jobs held by boys. Kitchen help, waitresses, machine operators, and unskilled factory workers made up 92% of the jobs held by girls. Only 2% were institutionalized at the time of contact. Of those who had jobs and terminated them, about one-third had been for reasons classified as "poor." Of those who were working, about half were satisfied with their work and one-fourth were actively dissatisfied. Lay-offs, failure to find a job and involvement with the law were frequent reasons given for not being employed. Those who had jobs generally had gotten them through friends and relatives or by direct application to the employer.

The employed boys took home an average paycheck of $46.00 per week, and the employed girls $38.00 weekly. When rating the adequacy of pay, one-third of the employed boys were taking home enough money to live independently and adequately. About one-half of the employed girls were rated as making sufficient income for self-sufficiency, a lower amount being deemed essential for girls than for boys. Former students were extremely optimistic in claiming independent status. In actuality, however, only one-fourth of them were living independently - renting, living in their own homes, or in military housing - while three-fourths were living at home, with relatives or were in institutions.

As one might expect by the age represented, more girls were married than boys. Many of the girls married at extremely young ages. There was some problem of illegitimacy.

Less than one-half of the subjects had been clients of the Vocational Rehabilitation agency. Of those referred to Vocational Rehabilitation, a majority had already been closed or rejected from service by the time of follow-up.

Sixty-five percent of these students had not finished school and many felt that they had been forced to leave school. Many wished they had had more schooling. Apparently many felt negative about their school careers and many others seemed to have had no emotional involvement whatsoever in school. Various academic subjects were mentioned frequently as both the most and least liked aspect of school. Industrial arts and home economics courses were popular. The students felt that relatively few professional people other than their teachers had been involved with them. However, many saw the school counselor as the appropriate resource for securing vocational advice.

An unusually high percentage of boys claimed that they were making plans to get further education or training. Evening high school, trade school and armed forces' trade training were mentioned frequently in these plans. The girls wanted to finish high school, go to a beauty school or into nursing.

The extensive involvement in crime among these students is striking. Forty-two percent of the population had police records. Thirty-eight percent of the boys and 15% of the girls had been implicated in serious offenses as juveniles and 11% of the boys had serious adult crime records. A boy was more likely to become involved in crime if he lived in a low socio-economic area, if his father worked in an unskilled job or was unemployed, and if he had dropped out of school.

Chapter 7

VOCATIONAL STUDY

The Minneapolis Vocational High School and Technical Institute offers technical trade training to a select group of special class students. Special classes with a smaller number of students and a teacher certified to teach the retarded are provided to instruct these students in trade-related subjects such as mathematics or English. The students are integrated into trade courses with the regular class students. The rationale behind this practice is that the educable retarded can do as well as regular students in the manual or "practical" aspects of trade training but would show great difficulty with academic subjects.

In recent years, however, Vocational High School has felt that it was difficult to justify acceptance of the retarded who fall below regular class students on nearly all measures when more able regular class students were being rejected from entrance into trade training because of low probability of success and over-enrollment in all programs. Typically, the special class student does not score at a high level on the standard paper and pencil tests (e.g. D.A.T.) used in selection of pupils for admission to Vocational High School. Many special class students seemed to benefit from the trade training provided at Vocational High School but records show that more than two-thirds of them failed to graduate or earn a trade diploma.

The "Vocational Study" was instituted to (1) study the criteria for selection of students entering the special class trade school program and (2) to determine whether it was reasonable to continue a program involving education of retarded students in regular trade training classes.

Since the beginning of the study, Vocational High School has moved further towards concentrating on post-high school vocational technical training in response to the performance demands of industry and business. The industrial arts programs in the comprehensive high schools throughout the city are being expanded to provide more intensive training in a variety of skill areas at the high school level. When this direction is accomplished, Vocational High School and Technical Institute will be almost entirely concerned with programs for students who have already completed high school.

"Lower-level" trades which have traditionally provided more comfortable accommodation for special class students have been declining in employment demand. Other trade courses, such as those involving service occupations, have become more difficult in their content and instructional demand. For example, nurse's aide courses have given way to pre-nursing courses, and specialized cooking and restaurant management are offered instead of food service training.

Method and Results

The essential design of the Vocational Study was to compare survival of retarded students in trade training at Vocational High School during the years the project was in operation. Table 11 shows the percentage of students selected who remained in trade training at various stages of the training. Various years, different methods of selection were used.

Table 11

Proportion of Retarded Students Surviving in Trade School Training

Stage of Trade Training	Year of Entrance 1961	1962	1963	1964
Scheduled	N=22	N=39	N=22	N=27
Entered first year	82%	76%	100%	89%
Completed first year	59%	43%	82%	
Entered second year	54%	36%	73%	
Completed second year	41%	33%		
Entered third year	36%	28%		
Completed third year	32%			

1961 Class: The traditional procedure for selecting special class students for trade training was to have the junior high school counselor refer those students interested and thought to be good candidates. A selection committee composed of representatives from the Counseling Department, Vocational High School, Special Education, the Branch Office of Vocational Rehabilitation and the Child Study Department reviewed the school cumulative folders of candidates and selected the ones to be admitted to the school program. Students with Wechsler Performance IQ higher than Verbal were given strong consideration. If a student had good teachers' recommendations, if he came from a school where it was known that the counselor carefully selected the candidates, and if he showed good attendance, the tendency was to consider him a good candidate. The coordinators of the trade areas at Vocational tended to pick students they thought would be most appropriate to their particular trade area. Students were scheduled to enter training the following fall. This was the manner of selection of the 1961 group.

1962 Class: In 1962, all 39 special class students referred by junior high counselors were accepted and scheduled to enter in the fall of 1962. No criteria were intervened in selection beyond those used by the counselor in the home school who had picked the candidates. This was done to permit comparison of different evaluation procedures to predict which students from this already somewhat selected referral sample would succeed in trade training.

All students were allowed to enter trade training irrespective of whether they were viewed as good or poor candidates on the basis of these evaluations. The effectiveness of the procedures for predicting success or failure of this group is discussed later in this chapter.

1963 and 1964 Classes: The 1963 and 1964 groups were selected by Project 681 staff after an intensive pre-vocational evaluation involving two-weeks attendance of each candidate in the project's unit. This procedure is outlined in more detail below. The entire "Ninth Grade" level special class from both of these years was studied by project staff and selection made from students recommended as likely candidates by home school counselors and teachers.

To recapitulate, the 1961 class was chosen by the traditional selection process; the 1962 class had no screening-out beyond that at the home school level but prediction of outcomes was made on the basis of two evaluation methods; 1963 and 1964 candidates were chosen by Project 681's expanded selection procedure, which included pre-vocational evaluation.

The data reported in Table 12 represent the situation as it existed during the 1964-65 school year. The 1964 class had just started their first year, the 1963 class were starting their second year, and the 1962 class were starting their third or senior year of trade training. The 1961 class had graduated in June of 1964. All individual outcomes will not be known until June of 1967, when the 1964 class is scheduled to graduate.

However, the significant trends are clear and there are enough data to make some comparisons as to which class had the highest proportion surviving at given points in trade training. The reference number for calculating percentages is in each case the number of students scheduled to enter the trade school each year. At each point in trade training, the number of students still remaining in training is compared with the original number who were scheduled to enter the first year of training.

The class (1962) that was not screened beyond home school referral shows the lowest survival rate. Next is the class (1961) selected by the traditional selection process, and finally the classes (1963 and 1964) selected by the project's extended evaluation show the highest survival rate. These results are consistent at each stage of training. For example, 43% of the 1962 class, 59% of the 1961 class and 82% of the 1963 class completed the first year of training. Thirty-six percent of the 1962 class, 54% of the 1961 class and 73% of the 1963 class entered the second year of training.

Prediction of outcome of the 1962 class: Although the 1962 class had no screening-out beyond that at the home school level, prediction of outcomes was made by the traditional and by the pre-vocational evaluation methods. The latter method involved two phases which included the following procedures:

Phase I (Referral and Intake Procedure)

1. Written information was obtained from the counselors of each of the students in the following areas:

- student's attitudes toward school
- parents' attitudes toward school
- student's present readiness work
- student's employment potential
- student's job expectations (present stage of vocational planning)
- counselor's opinion as to realism of vocational goals
- counselor's recommendations
- additional information felt significant (health, attendance, unusual factors)

2. Teachers (special class) made ratings of each student in areas of personal appearance, grooming, traits and behavior, group relations, leadership, ability to handle directions and instructions, ability to handle criticism and correction, attendance, achievement levels and a general comment or summary of characteristics. (When possible, contacts were also made with shop/home economics teachers.)

3. Project 681 workers interviewed each student and his parents. Information in the following areas from parents and students was recorded separately.

   - school history (likes, dislikes, feelings about special class placement, etc.)
   - family and social activities
   - responsibilities (in home, handling money, travel, appearance, etc.)
   - problem areas (relations with peers, adults, delinquencies, etc.)
   - health history and present status
   - work experiences
   - interests and occupational expectations
   - parents' opinions on abilities, limitations, needs
   - interviewer's impressions

4. A review and summary was made of all history information from the school cumulative file on each student, including particularly information such as:

   - date and grade when placed in special classes
   - significant comments of former teachers
   - all psychological examinations
   - achievement test scores
   - grades
   - attendance records
   - health information

Phase II (Pre-vocational Evaluation)

All students were taken into the project work unit (at Central High School) for a two-week period of testing, observation and job tryout samples. During this period the student was given:

1. psychological examination (including, as a minimum, the Wechsler and Bender)

2. battery of tests in specific aptitudes, achievement, interests and personality
3. twenty hours in each of the two work labs of the unit

Ratings were made by the lab supervisor of performance in each work area tried (production, mechanical, foods, etc.) plus measures of the use of hand tools, manipulation and coordination, spatial relations, and tryout on various pieces of equipment, etc. The lab supervisors also rated each student in appearance, traits and behavior (identical in form to that obtained from home school teachers).

At the end of the two-week period, each student was reviewed at a meeting of the staff and the DVR counselor. Information and findings obtained from Phase I and Phase II were discussed and a general consensus reached on vocational prediction.

Of the 39 1962 students, 22 or 56% were recommended by the project. Table 12 presents a comparison of the outcome of these students with those that were not recommended.

Table 12

Survival Rate of 1962 Class Students in Trade School Training

In Relation to Project Prediction

Stage of Trade Training	Students Recommended by Project	Students Not Recommended by Project	Total Students Remaining	Percent of Students Remaining Who Were Recommended
Total Scheduled	22	17		
Entered first year	20	10	30	67%
Completed first year	13	4	17	76%
Entered second year	12	2	14	86%
Completed second year	11	2	13	85%
Entered third year	9	2	11	82%

Relatively good prediction of outcome was achieved with over 80% of the students continuing in the program being those that were recommended. However, it was obvious that the attrition rate was extremely high even when using the highly developed evaluation and selection methods of the project. All but 4 students who were not recommended by the project did not complete their first year. However, half of the students who were recommended by the project did not complete their second year of training.

Summary

It was found that methods of selecting retarded students for a trade school program could be improved so that accurate prediction of survival in training would be increased. However, the rate of survival in trade school training remained so low as to render questionable the appropriateness of this kind of training for the retarded.

Students in the 1963 and 1964 special classes at Vocational High School were all recommended by the project. Using the results from the study of the 1962 class it can be expected that only 40% of students in the 1963 and 1964 classes will complete their training. Thus a low survival rate exists even when students had been selected by an intensive process involving analysis of all available record information, parent and student interviews, individual psychological testing, and twenty hours of observation and evaluation in work laboratories. The obvious conclusion was that the vocational trade training program was inappropriate for special class students. As a result no new special class students have been scheduled to enter Vocational High School.

Chapter 8

STUDIES OF IQ DISTRIBUTION, RELIABILITIES AND RELATIONSHIPS

The project did several analyses of IQ data. It became apparent early that study in this area was needed. Eligibility of students for project service was not based on IQ but upon previous placement in classes for the retarded. This meant that they had been so placed under regulations of the State Department of Education. In Minnesota the guide for IQ range for educable classes is 50-75. However, emphasis is placed on a more complete diagnostic work-up (including educational, medical and psychological aspects) than upon any given test score.

IQ scores, in and of themselves, were purposely de-emphasized in serving students in the project. In other words, efforts were made not to rule out trying any particular service because of low IQ score.

However, the project staff was continually faced with the ingrained and generally accepted concept of psychometric classification defining mental retardation. If a person has an IQ of 90, he is considered dull; if it's 80, he is borderline; if it's 70, we think about a sheltered workshop; if it's 60, we think about a day care center or an institution. Terman and Merrill (1937), in discussing why they did not shift to standard scores in the 1937 revision of the Binet, state: "One reason is that the majority of teachers, school administrators, social workers, physicians, and others have gradually accumulated considerable information in regard to the educational and behavior correlates of various grades of IQ. They know, for example, that an IQ of 80 signifies a particular grade of dullness, one of 50 a particular grade of mental deficiency, etc. (p.28).

Classifications are thus assumed to not only have a generalized usefulness to school administrators from the standpoint of program needs, but to also have specific meaning in diagnosis and treatment of the individual. Whether or not this may be justified in any given individual case, teachers, counselors, social workers and psychologists continue to operate in a majority of cases within this classification framework. The two-point IQ differences between IQ 49 and IQ 51 and between IQ 79 and IQ 81 have had great significance in practice, if not in statistics.

The Manual for the WISC (Wechsler, 1949) reports reliability correlations ranging from .86 to .96 which increase with age. Terman and Merrill (1937) report a coefficient of .94 for the 70-89 IQ range and a coefficient of .98 for the below 70 IQ range on the 1937 Binet revision. They go on to state: "The extreme accuracy of the scales at the lower IQ levels will be gratifying to those who make frequent use of the test for clinical purposes and who are rightly concerned with the dependability of their findings." (p.47).

In contrast, the studies done by the project found inter-test correlations between Binets and between Binet and Wechsler scales running from .43 to .68. We found, using the standard classification system (IQ 80-89 dull normal, 70-79 borderline, and below 69 mentally defective), that only

31% of the students kept the same classification on subsequent testing. The time between initial and subsequent testing ranged from a few months to several years. As would be expected, the longer the time period between testings, the lower the correlation between initial and later test scores. Also, as would be expected, there was a factor of regression toward the mean since these students were originally identified and selected as having atypical low scores. However, there appeared to be a multitude of additional reasons for the instability of individual IQ scores, such as the test setting, the reason for testing, the particular test used, the relationship of the student to the psychologist, and the general motivational factors affecting the testee. At any rate, it was obvious that a given score could have no interpretation in and of itself. Students' scores were unstable and could not be used with confidence for the prediction of individual potential.

Distributions of IQ Scores

Several distributions of IQ scores were obtained. It was found that these varied considerably depending upon the test used and upon the age of the students when tested. Students retested in the project's service unit (at an average age of seventeen) showed a mean increase of eight IQ points (from IQ 70 to IQ 78) and an increase in dispersion of scores.

Since students referred to the project might represent several biases in selection, a more basic group of students was chosen for concentrated study as most representative of the special class population in the school system. This group consisted of the total number (138) of students who were enrolled at the ninth grade level in special classes for the retarded during the 1962-63 school year (see Chapter 9).

Results from IQ distributions of retests and former tests showed the same factors: later tests tended to be higher than earlier ones. Binet and Wechsler Verbal IQ's tended to show similar distribution, and Wechsler Performance IQ's were higher and more scattered in their distribution. Interpretation of any particular IQ is related to the test used and the age of the student when tested. This is illustrated in Figure 4.

Looking at all IQ scores available on individual students, it was found that more than half of them (69%) had at least one IQ score over 80 and that more than half (93%)of them had at least one IQ score below 80.

Predictive Relationships

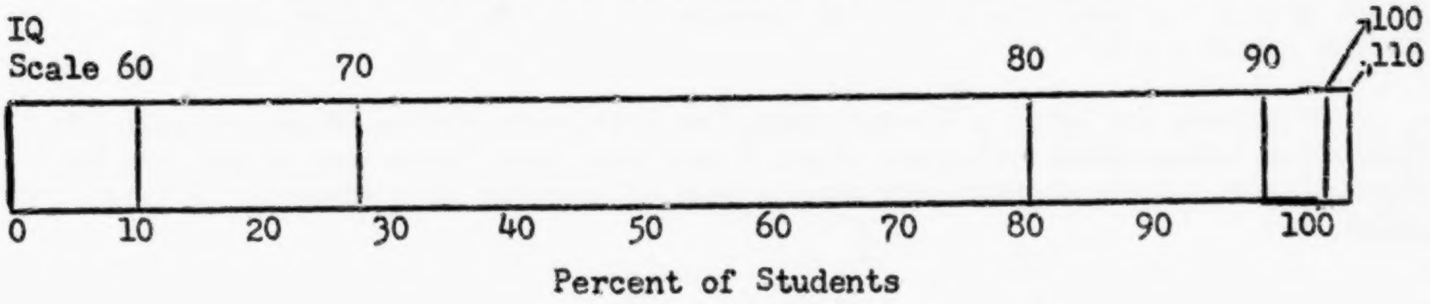
The most common testing pattern of the students in special classes was one of a relatively early Binet (mean age of seven), a relatively late Binet (mean age of thirteen) and a still later Wechsler (mean age of sixteen). In addition, academic achievement test scores (Iowa Test of Basic Skills) were available on all students, as were teacher estimates of achievement. Correlations between IQ scores and achievement measures ranged from .32 to .49.

Figure 4

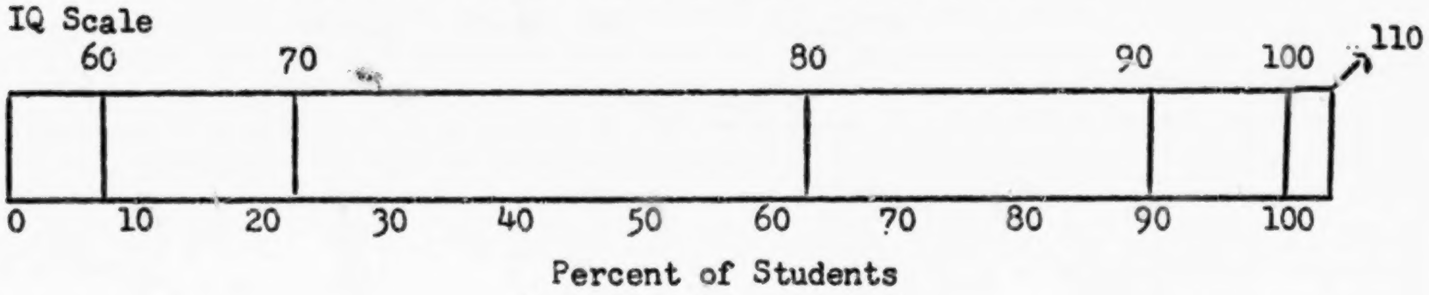
Variations in the Proportions of the Same Students Falling in Different IQ Ranges on Different Tests

(Data from "Ninth Grade Study," N=138)

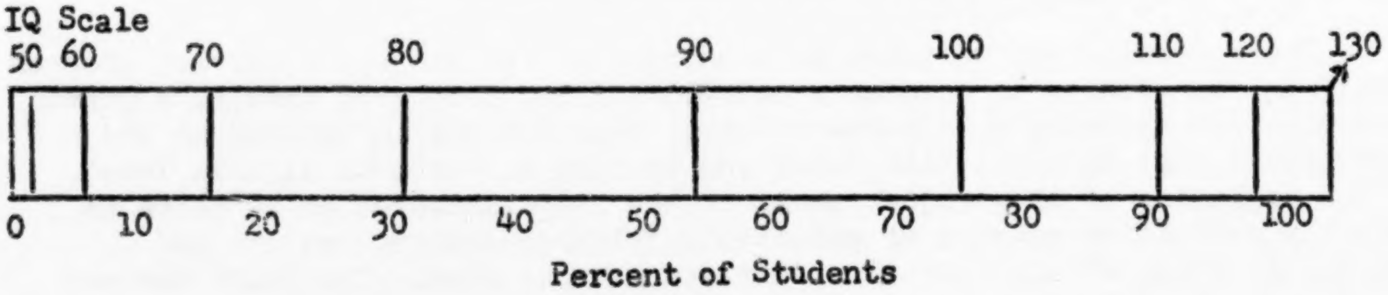
Binet Tests Administered Prior to the 9th Grade



Wechsler Verbal Administered During 9th Grade



Wechsler Performance Administered During 9th Grade



Early in the project a preliminary analysis was done based upon forty-one students who had received services and who had reached a reasonably stable outcome - twenty were regularly employed and twenty-one were not employed and seeking work.

All of the IQ test results showed a mean IQ difference of eleven to twelve points between the two groups. The achievement test scores and teacher ratings divided the two groups with little overlap at a point which indicated "functional" attainment (e.g. a student is said to have reached a functional level when his reading skills have reached a point where reading is of practical usefulness to him, generally considered at the third to fourth grade level).

However, in later analysis when the criterion groups were increased to over four times their original size, these neat and clear-cut relationships disappeared. This significant comparison of results is presented in Table 13 below.

Table 13

Comparison of "Employed" and "Non-Employed" Criterion Groups on Preliminary and Later Results

	Early Results		Later Results	
Predictive Measure	Employed (N=20)	Non-Employed (N=21)	Employed (N=88)	Non-Employed (N=123)
	(Mean Scores)		(Mean Scores)	
Early Binet	79	67	75	72
Late Binet	71	60	73	70
Wechsler Verbal	81	69	81	76
Wechsler Performance	82	70	85	80
Wechsler Full Scale	80	68	80	76
Iowa total (grade level)	4.8	2.8	4.5	4.1
Teacher achievement rating	4.5	2.9	4.0	4.0

In the more complete and later results the largest spread of IQ differences between the employed and the non-employed is five points, and there is virtually no difference in academic achievement measures.

These results may be taken as a measure of the project's service program itself in its efforts to counter a self-fulfilling prophecy, namely, a person is identified as being at a certain level, therefore he is treated on the presumption that he is at this level and thereby he performs at this level. At the beginning of the project, most of the staff accepted an IQ score as a fairly definitive measure of potential. With re-testing results and functional study of students this confidence broke down. The staff members found themselves looking more at other factors than at IQ in order to make judgments about individual student's potential. The staff, in effect, became less prejudiced against the low IQ student because they found IQ not so relevant a factor. All students were viewed in terms of their needs for service rather than in terms of a predetermined set of assumptions based on an IQ score. It is this development which accounts for a large part of the differences between the early group and the later group results shown in Table 13.

The results in Table 13 may, therefore, be interpreted as supporting evidence for the project's policy of attempting to serve all referrals irrespective of "feasibility determination." The traditional feasibility factors in working with the retarded involve IQ scores and school ratings. These factors have not only been found to be unreliable predictors of employment outcome, but they also rule out a large number of rehabilitation candidates most in need and most able to benefit from rehabilitation services.

Chapter 9

"THE BORDERLINE STUDY" AND THE "NINTH GRADE STUDY"

The broadest population studies undertaken by Project 681 dealt with selected and unselected cross-sections of the special class population. This chapter describes these studies, the results of which form the basis for the description of the retarded school population presented in Chapter 11. Implications from these studies are incorporated into Chapter 14.

The first such study, which involved a selected sample of special class students, was known as "The Borderline Study" and was completed in 1962. It involved intensive case study of students who functioned as retarded but were psychometrically high. This study served as a pilot for the development of case study methods. The second such study, which involved an unselected sample, was known as "The Ninth Grade Study." It was begun in 1962 and completed (first follow-up) in the summer of 1964. Building upon the pilot methods, the Ninth Grade Study was an intensive, case-by-case analysis of the characteristics, problems, potentials, and possible courses of rehabilitation of the entire 1962-63 ninth grade special class for the retarded. Together, these two studies and their off-shoots were designed to furnish a comprehensive picture of the retarded whose needs the special education and vocational rehabilitation programs should be desigued to serve.

The subjects of the Borderline Study were those students in special class for the retarded, grades 8, 9, and 10, 1961-62, whose last individual IQs were above 77. There were 70 such students city-wide. Pupil records were studied, and school staffs were consulted in each case. School records surveyed were the pupil's cumulative record folder, census cards and family folders, central special educational files, and the files of the Child Study Department. Cross-sample and intra-sample comparability was sought by the use of standard data-abstracting forms. School personnel were interviewed to secure additional information and opinions. The school counselor, nurse, social worker, and special class teacher were seen individually by the research psychologists. A set of structured interview forms was used to record the interviews.

The characteristics of the Borderline students were highlighted by the use of two contrasting samples. One sample was made up of the 50 students in the same classes (special classes, grades 8, 9, and 10, 1961-62) but with IQs of 63 or below; this was termed the Low group. The other contrast sample consisted of 70 students in regular classes, matched to the Borderline students by grade, sex, and junior high school district of residence; this was termed the Regular group. The matching by residence was intended to somewhat control the sociological variables evident in the special class population. The Low and Regular samples were studied from records only, without personal interviews.

The data gathered from records and interviews were entabled and analyzed mostly in terms descriptive of the samples and their contrasts. Some classes of data, being too complex or subjective for statistical treatment, were analyzed subjectively.

Using and adding to the methods piloted in the Borderline Study, the Ninth Grade Study was undertaken. In this study, the 138 ninth grade students in the 1962-63 special classes for the retarded were individually studied. Methods developed in the Borderline Study were used. In most cases (65%), the ninth grade students were also observed over a 2-week evaluation period in the Project 681 service unit (see Chapter 12 for a description of this evaluation), and the parents were interviewed in their homes. The intent of the Ninth Grade Study was to analyze the individual histories, situations, problems, and potentials of a representative sample of retarded students.

Being the most thorough, representative, and broad of the many population analyses of Project 681, the Ninth Grade Study was taken as the definitive description of what Minneapolis public school retarded students are like. The Borderline, Low and Regular groups of the Borderline Study served as reference and contrast. For specific purposes, data were also gathered on some other populations of adolescents such as Minneapolis residents in the state school for the educable retarded, inmates of the state hospital for the below-educable retarded, an experimental program for trainable retarded and unusual educable retarded at the Sheltering Arms in Minneapolis, and the basic Follow-up Study (described elsewhere in this report). Base rate and demographic data were secured from Profile of Minneapolis Communities (Hennepin County Health and Welfare Council, 1964). Other base rate information was secured from studies of school drop outs and graduates made by the Counseling Department, Minneapolis Public Schools.

The various populations studied are shown on the accompanying table.

The ninth grade students, and to varying extents the other groups, were studied in terms of objective data and in terms of professional opinion. The latter requires clarification, since it is usually not a prominent feature of a population study. The difference between objective data and professional opinion may be illustrated by the difference between family status and family influence upon educability. The first is an objective statement of whether the family is intact or broken. It has little direct utility in case treatment or even in population description, except as it may be inferred to have case dynamic significance. Its advantage is its objectivity and availability; this kind of data does not require defense. The second, family influence, is an opinion. It has direct utility, since it describes a factor of direct influence upon the student. Its disadvantage is its subjectivity, and it requires a defense of both reliability and validity. Such a defense was carried out in the Ninth Grade Study in the form of a construct validation of both objective data and the professional opinions. A full discussion of this construct validation is presented in Chapter 13 in connection with prediction of outcome. It was found that the opinions had greater predictive validity than did the objective data.

Since a description of the retarded population will be found in Chapter 11 of this report, only a few of the more salient findings of the Ninth Grade Study will be mentioned here.

Table 14

Population and Sample Groups Referred to in Text

Group	N	Definition	Representing
Ninth Grade	138	All students enrolled in special class for the educable mentally retarded, ninth grade, 1962-63.	The kinds of students who are identified as mentally retarded in the public school setting, normal diagnosis and assignment.
Borderline	70	All students assigned to special class for the educable mentally retarded, grades 8, 9, and 10, 1962-63, IQs 78 or above.	The kinds of students who function in a retarded manner in the school setting, but who are psychometrically dull or borderline.
Low	50	All students assigned to special class for the educable mentally retarded, grades 8, 9, and 10, 1962-63, IQs 63 or below	The kinds of students who function in a retarded manner in the school setting, and who are definitely retarded psychometrically.
Regular	70	Sample of students in regular class, matched to Borderline group by grade, sex, and junior high district of residence.	Regular class students who operate in somewhat the same sociological circumstances as do the Borderline special class students.
Graduates	1032	Sample of the 1957-58 regular class grade 9 enrollment, who eventually graduated.	Regular class graduates, sociologically unselected other than "urban."

(continued)

Population and Sample Groups Referred to in Text

Group	N	Definition	Representing
Drop outs	202	Sample of the 1957-58 regular class grade 9 enrollment, those who dropped out before graduation.	Regular class students who drop out.
Basic Follow-up	420	All special class educable mentally retarded students who left school by graduation or drop out from 9/57 to 6/60.	Special class students, so classified on criteria similar to those of the present, with post-school adjustment known.
Owatonna	16	Minneapolis residents, age 12-21 at the Owatonna State School.	Educable mentally retarded, institutionalized.
Faribault	39	Minneapolis residents, age 10-17, at the Faribault State School and Hospital.	Institutionalized mentally retarded, excluding a select group of educable level.
Sheltering Arms	45	Students at the Sheltering Arms experimental project, age 6-15.	Trainable-level retarded, and educable retarded with unusual problems, with program-participating parents.
SLD - Special Learning Disabilities	84	Students in classes for those with special learning disabilities, grades 1-9.	Non-retarded students with serious emotional, neurological, or behavior problems.

A striking feature of the special class population was its sociological identity; of the ninth grade students, 65% lived in the sociologically deteriorated central area of the city where 27% of the city's juvenile population lived. Boys outnumbered girls, two to one. The IQs of these retarded youngsters were unstable and tended to rise with age (regress toward the mean). Their non-verbal ability tended to be higher than their verbal ability. Most of them read at the 3rd or 4th grade level, and their other academic achievement was similar. About a third of the students showed emotional disturbance severe enough to depress their educational function. A fourth of the students came from homes which were actively anti-school, or had relationships with the school which were destructive of the student's personal integration, or which seriously interfered with school attendance or acceptance. Half of the students came from subcultures which were at best passively unsupportive of education. Over half of the students showed a need for aggressive social casework.

Two-thirds of the ninth grade group showed potential for academic benefit from the completion of senior high school, yet a third dropped out before finishing the tenth grade. Nearly 90% showed potential for social development throughout a senior high program. About 80% showed potential for competitive employment in adulthood, and three-fourths of the remainder showed potential for terminal sheltered employment.

The Borderline, Ninth Grade, and other studies gave rise to a number of questions and suggestions regarding curriculum, student personnel, and rehabilitation practices. These will be covered in Chapters 14 and 15.

Chapter 10

ANALYSIS OF STUDENT AND PARENT SELF-REPORTS

Interviews with students entering the project's service unit were recorded on a standardized intake interview form, and a parallel form was used to record the parent interviews (see Appendix 2). These forms were developed to systematically cover several areas of information and to obtain comparable information from students and parents. Educational history and attitudes, family-related activities, competence in travel and self-care, social competence including peer relations and delinquency, health, and work experience and plans were areas of inquiry. The interviewer also recorded the parents' stated attitudes toward retardation, and he recorded his impressions of the home. Interviews were completed with over 500 students and their parents. All were conducted by the professional staff of the project.

Method of Study

A random sample of 50 matched sets of student-parent interviews was drawn from the files and the information analyzed. One set had later to be discarded from the study when it was discovered that the parent interview was not complete. Characteristics of the 49 students thus selected were checked and found to be typical of the project's service population as a whole. There was no significant difference of the sample from the total project population in the distributions of age, IQ, reading achievement, and residence. The average age of the sample was 17 years with a range from 15 to 22 years. The mean Wechsler Full Scale IQ was 75 with a range from 46 to 97 (mean Verbal was 76 and mean Performance 79). The average reading achievement was at grade 3.7 with a range from none to 8th grade level.

Responses to each of the interview questions were summarized to obtain descriptive information on what the students and their parents reported, to provide a basis for continued use of this kind of data, and to note any general attitudes or factors which might emerge, particularly in the area of comparison between the student and the parent report.

Results

School History and Attitudes: Parent recall of schools attended was more complete than student recall. In 33% of the cases students and parents gave identical responses. In 49% parents recalled more schools than the students did. In 18%, students recalled more schools attended than parents did.

Parents were more accurate in the information they gave about special class placement. Twenty-four percent of the students said they did not know or could not remember when they went into special class. Fourteen percent of the parents did not know when the student entered special class.

Students tended to report that they enter special classes at a later time than the parents reported (at 6th grade compared to 4th grade).

Parent and student recall were checked against the school files. The average time of entry into special classes was at grade 4.4 for the group as a whole. The accuracy of the responses given in the interviews (using either grade or year) was as follows:

Both student and parent response accurate	31%
Parent response (only) accurate	31%
Student response (only) accurate	16%
Neither response accurate	22%

Thus in about 2 out of 3 cases, the parents gave accurate information as to time of entry into special classes and in about half of the cases students gave accurate information.

In the area of attitudes toward school and special classes, more students expressed positive feelings about school in general than about special class, while more parents reacted positively regarding special class placement and negatively about the schooling in general their son or daughter had received.

Table 15

Attitudes on School in General

	Percent of Student Response	Percent of Parent Response
Positive	65%	37%
Neutral	21%	39%
Negative	14%	24%

Table 16

Attitudes on Special Class

	Percent of Student Response	*Percent of Parent Response
Positive	47%	64%
Neutral	24%	24%
Negative	29%	10%

*2% said they did not know student was in special class

Friends, Home and Family: Parents gave more immediate indication of concern than students did about their friends. Half of the parents indicated that the student had few or no friends and an additional 12% of parents mentioned problems the student had with friends or in making friends. One-fourth of the parents gave disapproving or negative comments on the activities pursued with friends.

Student responses indicated that they had more friends from among schoolmates than from outside of school or in the neighborhood. Yet only one-third of the students mentioned participating in any extra curricular activities in school.

In families where there were brothers and sisters, the parents reported that the students had trouble getting along with siblings or lacked any common interest with them in two out of three cases. In 20% of the cases, parents could mention no activities that the family did as a whole or stated that the family did nothing together.

In nine out of ten cases students and parents both mentioned regular home chores that the student was responsible for carrying out. In three out of four of these, the parents stated that the student had to be reminded to do them, and in 14% of the cases the parents said they were not done satisfactorily.

In 16% of the cases parents stated that the student was not able or not allowed to use any tools and in an additional 28% of the cases the parents responded that they had not seen their child use tools or did not know if he could. In 14% of the cases, parents stated that the student was very good or outstanding in the use of tools and in working with his hands. Ratings on these students were obtained from the project's work evaluation labs. Of this 14% viewed as competent by their parents, 4% were rated definitely above average (in comparison to other project students), 6% about average and 4% below average.

According to the parents, about half of the students were given responsibility to the extent of being left home alone.

Money: Forty-one percent of the students reported that they received an allowance; 18% of the parents reported that the student got an allowance. This discrepancy very likely reflects, in part, a difference in parent and student understanding of what constitutes an allowance, with the parents responding more accurately in terms of a regular weekly amount of money. It is also interesting to note that the amount the students reported receiving appeared quite exaggerated.

However, on the more general question of how they got spending money, 20% of the students state that they did not get any money, whereas 2% of the parents said the students did not get any spending money.

Seventy-one percent of the students said they were allowed to buy anything they wished with their allowance, 28% of the parents asserted that no restrictions were placed on what the student chose to buy.

Seventy percent of the students reported that they saved some money; 47% of the parents reported that the students did some saving.

Sixty-five percent of the parents reported that the student was able to make change and handle money adequately. These students were tested in the work evaluation labs. Of the 65% described by their parents as adequate in money management, 47% were able to handle money to get along under most circumstances, 8% could count change to a limited extent and the remaining 10% could not. Of the total group of students in the sample, approximately half could handle money adequately to get along at the time they were tested in the work evaluation labs.

Travel and Transportation: Approximately two-thirds of the students were able to get around the city on their own either by bus or walking. Here there was quite close agreement between student and parent responses. However, in the matter of handling bus routes the students tended to be more cautious — more often stating that they could not while parents said they could or gave a "qualified yes" response. Six percent had never been outside of the metropolitan area on their own.

Appearance and Grooming: Nine out of ten parents stated that the student was responsible for his own appearance. One-third of the students stated that they did not pick their own clothing; 86% reported that their mothers or other relatives helped them with their grooming.

Delinquency and Social Problems: From both student and parent reports, approximately one-third of the students are reported as having been in more or less serious trouble. Parents tended to report this somewhat more often than the students did. In 6% of the cases parents reported major troubles that the students did not mention, and in 4% of the cases parents reported minor incidents that were not mentioned by the students. On the other hand, in 4% of the cases students reported minor incidents that parents did not and in one case a student reported a major incident that the parents did not mention. Twelve percent of the students reported that they were currently or had been on probation.

The students reported that they got along somewhat better with other teen-agers than they did with adults, though the differences were slight. When asked "how they got along..." 20% of them responded with definite problems in getting along with other teen-agers while 28% of them talked about problems in getting along with adults.

Health: Parents mentioned health problems more frequently than did the students and with more consistency. It might be expected that the frequent mention of a health problem or condition would be a more frequent response to a general question on health than to the more specific question about a handicap which might limit the type of work a person could do, since many people have disabilities which are not necessarily job handicaps. This was true with parent responses. Thirty-three percent mentioned a general health problem and 27% mentioned a health condition that they felt would limit the kind of work the student could enter. Sixteen percent of the students mentioned a general health problem but 18% talked about a health condition which they felt would limit the type of work they could enter.

To direct health questions, 31% of the students said they had frequent nervous symptoms, 14% frequent headaches, 8% frequent pain and 16% said they were presently taking medication.

Work Experience, Plans and Expectations: Two-thirds of the students are reported as having done some kind of work for pay. Students tended to report their jobs as at a somewhat higher level of employment than did the parents. Forty-three percent of the jobs as reported by the students would be rated a very marginal employment compared with 59% of the jobs so reported by the parents.

Forty-five percent of the students and 35% of the parents mention service area jobs as the kind of work the student could do right now. Half of the parents responded that they do not know what kind of work the student could do and one-fourth of the students gave a "don't know" response. "Don't know" response of parents increased to over half (56%) when they were asked what kind of work they thought the student should go into in the long run.

Student response to what kind of work they really wanted to go into showed a decrease in service area jobs (45% to 31% mention) and an increase in mechanical and production area jobs (22% to 35% mention). Fourteen percent mentioned professional or semi-professional jobs. Most students (70%) responded "don't know" to what kind of work they thought they actually would be doing five years from the time of inquiry.

Parental Attitude to Retardation and Future Plans: In 57% of the cases, the parents reported that the student was retarded. In 14% of the cases parents said they did not know or were uncertain. In the remaining 29% parents felt the student was not retarded. The most recent IQ's (Wechsler Full Scale or Binet) were as follows:

Table 17
Relation of Parent Opinion of Retardation to IQ

Parent Opinion	Mean IQ	Range	Percent of IQ's Above 80
Retarded	71.6	46 - 96	25%
Uncertain	74.6	57 - 86	42%
Not retarded	85.5	67 - 97	71%

Two-thirds of the parents felt or stated that they had not been given help in planning for the student's future. Nine out of ten felt the student still needed further schooling and/or training. Forty-four percent mentioned this as something the student would need most in order to do as well as he could. Equally often mentioned as something the student would most need was affection, attention, patience, encouragement to develop confidence, friends, etc. and guidance from an understanding person to help him or her develop a sense of direction. A few parents (8%) mentioned need for professional help (medical, psychological, speech). Sixteen percent of the parents said they did not know what the student would need to help him do as well as he could, and a few (6%) felt the student might need a lot of things but that "it would not do any good anyway."

Summary

This analysis tapped several hundred discrete items of information and attitude. Any attempt to summarize these data requires selection and emphasis of particular areas. The situation in which the interviews were conducted should also be considered in any interpretation of responses. For example, the fact that the interviewers were clearly "school-identified" personnel may make more significant the negative attitudes expressed about school programs. The fact that these were initial interviews may make more significant the open admissions of personal and social problems.

Parents tended to give more accurate school histories and feel more positively about special class placement than the students did. Students tended to report later entrance into special class than actually occurred and more positive attitudes about school in general than about special classes.

Both students and parents openly expressed concern about friends and family relationships. Approximately half of the students were seen as able to handle money adequately enough to get along and about two-thirds could get around the city on their own. About one-third reported a health problem or condition. About two-thirds reported some work experience but over half of these jobs would be considered extremely marginal employment.

In general, parents tended to be more accurate and reliable in the information they gave, but also quite often negative in talking about the students. Parent opinion on retardedness was fairly consistent with classification by actual IQ data.

Both students and parents tended to be cautious about job plans, with over half of the parents stating they did not know what kind of work the student should go into.

Nine out of ten parents felt the student still needed further schooling or training of some type. Forty-four percent mentioned this as something the student would need most in order to do as well as he could. Equally often mentioned as something the student would most need was affection, attention, patience, encouragement to develop confidence and friends, and guidance from an understanding person to develop a sense of direction.

Chapter 11

A SUMMARY OF POPULATION CHARACTERISTICS

Several population studies have been reported in the preceding chapters. Each study contributed to the understanding of the nature of the retardation problem faced by educational and rehabilitation services. The description which follows is an attempt to synthesize the studies' findings into a coherent picture of the educable mentally retarded and their needs as represented by the urban special class population studied.

Vital Statistical Description

The simplest, though perhaps not the most immediately meaningful, picture can be gathered from the vital statistics of the educable mentally retarded studied. Putting together the findings, one would say that special class students tend to be a year or so behind their regular-class age mates in grade placement. Their intelligence test scores tend, naturally enough, to be lower than those of regular class students; however, the pattern is complex enough to warrant a separate discussion (see Chapter 8). These students were so poor in academic achievement as to show little overlap with the regular class students. Boys outnumber girls at a rate of two to one. There are at least four or five times as many non-white students in special classes as would be expected from the base rate in the city's population. Two-thirds of the retarded come from the sociologically disadvantaged areas of the city. Over a fourth of them experienced family break-up during their elementary and junior high school years.

The mentally retarded in special class are reported to be different to instruct, to understand instructions poorly, and to require more teacher time than the regular class students. Most of them drop out of school before they complete a twelve-year program.

Educational Problems

It should not be assumed that the educational problem of the retarded is entirely due to inadequate intellect. A great many other causes for retarded functioning were identified through the case study method employed.

Though almost all of the educable mentally retarded functioned in a retarded or borderline fashion, perhaps half of them gave evidence of having had "native" potential for at least dull normality. Even if that statement were not based upon a tally of intensive case studies, it would be believable in view of the frequency of extra-intellectual problems found in this population.

Only about half of the educable retarded were found to have ordinary or average emotional status. About a third showed emotional disturbance sufficient to frequently and significantly reduce the student's efficiency in school performance. A few exhibited a full-blown neurosis or ambulatory psychosis.

Another third of the educable retarded showed a handicapping life style or mode of adjustment. This malfunction was a life pattern which interfered with school efficiency rather than overt emotional disturbance as such. It included such things as conduct which brings about rejection by peers or by authority, excessive demand for attention and supervisory time, and the working out of a destructive self-concept. Also included is the interesting and not infrequent "disabled child syndrome," wherein a sheltered and much-encouraged child fails to develop an awareness of performance standards. A very few reflected outright attitude problems.

A few, perhaps 10% of the educable retarded, presented a visuomotor performance defect which was considerably more severe than could be accounted for by their intellectual level alone. Another 10% or so, and not necessarily the same ones as had visuomotor problems, showed the kind of general behavior which is often associated with brain damage.

Clear-cut physical handicaps were not especially common among these retarded, except among those few whose clinical syndromes encompassed both physical and mental defects. However, many of the retarded seemed to have vaguely poor health and have long histories of minor health problems.

The family problems of the educable retarded are covered in some detail below, as are their sociological disadvantages.

If the extra-intellectual problems of the secondary-level educable retarded were met by appropriate school and community supportive services, most of them might be able to profit academically from a full twelve-year school program. Almost all of them might be able to benefit in terms of social development from completion of a twelve-year program. If supportive services were focused in the preschool and elementary years upon populations which have a high incidence of retardation, it is quite likely that much of the present kinds of retardation could be reduced in both numbers and severity. Even on the secondary level, many of the problems seemed of such order as to be amenable to treatment.

Identification and Diagnosis

The people described here are those mentally retarded who are identified against the educational criterion and are in the adolescent age range. Among all those who are considered to be mentally retarded by any criterion and in any agency caseload, this group constitutes the overwhelming majority, comprising perhaps 90 to 95% of all the retarded. They differ most from the institutional retarded population, not only in level of competence but also in the relative absence of the clinical types. Most of the retarded seen by Project 681 were functioning in a retarded manner because of multiple causes.

A retarded person is first identified by his failure to meet the normal standard of behavioral competence as seen against a real-life criterion. Preschool, a retarded child is one who has a gross delay in his developmental schedule; he is delayed in speech, motor activity, or self-care. During the school years, the criterion against which retardation is seen is the acquisition of school learning, plus some aspects of school behavioral management. Very few preschool children are identified as retarded. During the school years, the number grows. In the later school years, dropout begins to reduce the number of retarded. In adulthood, only those who are retarded in social and economic competence remain as a hard core.

Identification against the school criterion complex begins to be possible quite early in the school career. The standard descriptive report of the kindergarten teacher, blind-sorted several years later, is about as diagnostic of retardation as is the kindergarten Binet. Subsequent behavioral and achievement descriptions by the teachers frequently form a coherent running account of the course of scholastic retardation.

The student is first identified as retarded because he is failing to develop normally in the school setting, and because lack of mental ability appears to be a factor. The school system's diagnostic resources are then called upon for confirmation. In Minneapolis, the diagnosis of retardation includes a consideration of school performance, a home investigation by the school social worker, a medical examination, and individual psychological examination. The need for placement in a special class for the retarded is determined on the basis of all this evidence, and is reviewed by the Department of Special Education. The classification as mentally retarded stands until the student is seen to be capable of normal educability or unless some other special learning disability (such as emotional disorder) appears to be the main problem.

The result of this diagnostic process is that the mentally retarded population is both identifiable and describable. The diagnostic category can be relied upon as reasonably accurate. The diagnosis is reached through as thorough and responsible a process as is ordinarily expected of a diagnostic system. This point is to be stressed, in order that there may be no question of whether the population described here is "really retarded."

The concept of "pseudoretarded" is not helpful in those cases which are found to violate the stereotypes of retardation, though a concept of "pseudodeficient" might well be invoked. That is, substantially all of the students considered here are really retarded by operational definition, though they may not be intellectually deficient by substantive definition. Throughout this report, retardation refers to a description of how the person functions rather than to a causal entity. Reference is occasionally made to mental deficiency, which in this report refers to a causal entity of sorts, best described as a hypothetical lack of intellectual capacity. Retardation can be observed, whereas deficiency must be inferred.

The diagnosis of retardation can sometimes be made early in the student's school career, as was mentioned in connection with the kindergarten reports. In practice, students vary widely in the grade level at which the label is attached. Those whose function is most inadequate tend to be identified earliest, of course, but this is by no means uniform. A substantial fraction of the educable retarded are placed in special class in the first and second grade; this is most likely to happen if there are previously identified retarded siblings or if the family is noted to be grossly inadequate. The distribution of age at identification has other modes at grades four and seven, where the school performance criterion changes emphasis. A few are identified as late as the senior high school years. The influx of retarded students to the city during their school careers (about one-fifth do so) obscures the pattern of age of identification, since the diagnosis is usually not immediate.

Another point should be made about the diagnosis of these students. As a general rule, a young child is less differentiated than is an older one. A young retarded child may be readily diagnosed as retarded, and yet the exact nature of the retardation may be very difficult to describe differentially. It is usually difficult to point out the differential aspects of his retardation, and equally difficult to ascribe cause and prescribe long-range differential treatment. In time, he matures. As he matures, he differentiates. By the time he reaches the junior high school level, it is possible to make a much more elaborate differential diagnosis. The diagnosis can then deal more exactly with the causes and individual characteristics of that person's retardation, and it is possible to specify more differential courses of treatment. The purpose of any diagnosis is to derive constructive courses of action. The nature of the educational problems found in the special class retarded population is thus more visible and more treatable on the secondary level than when the child is very young. Because of this progressive differentiation, and because the population studied by Project 681 was of secondary school age, the project's findings can be more elaborate than could be a description of early elementary retarded children.

The conventional diagnostic process was described above. The project evolved a case study method which extended the conventional process. Some of the specifics of this case study method are described in Chapter 12 of this report. The validation of the method is briefly described in Chapter 13.

Measures of Ability

It is tempting to define a retarded population in terms of IQ. The population described here is defined in the more concrete terms of retarded performance in the school setting, followed by a child study with social, educational, and psychological components. Yet, the measures of ability, of which IQ is the most common expression, do have a legitimate place in the description of the mentally retarded. The view of this report is that IQ is one index of the symptom complex called mental retardation. As an index, the IQ should have at least moderate, but not perfect, correspondence to the more concrete and direct measures of life performance. The atypicality of this population, and the restricted range in IQ, reduce both the reliability and the direct predictive validity of the IQ. With these expectations in mind, the patterns reported in Chapter 8 can be briefly reviewed.

One IQ pattern noted in this population is an instance of the phenomenon of regression toward the mean. If a group of individuals is selected to be atypically low on a given first measure, their average score on a second measure will regress toward the mean to an extent proportional to the inverse of the correlation between the two measures, and the scores on the second measure will be more dispersed than were the scores on the first measure. This population is selected to be low in IQ, and the IQ which identified them as retarded can be considered the first measure. The nature of statistics is such that, on any subsequent test, these people ought to score more normal and more scattered IQ's. The longer the time between tests, and the more different the two tests (a Binet versus a WAIS Performance scale, for example), the more this phenomenon of regression toward the mean should be evident. The IQ scores of this population should rise and scatter with time.

Is this found to be the case? To a large extent, it is. Among the educable mentally retarded, later tests tend to score higher than do earlier ones. Binet and Wechsler Verbal IQ's tend to show similar distribution, and Wechsler Performance IQ's are higher and more scattered in their distributions. Secondary level retarded students tended to score higher in IQ than these same students did while on the elementary level. On the Wechsler scales, Performance tended to be higher than Verbal IQ.

The subtests Picture Arrangement, Picture Completion, and Object Assembly tended to be high in comparison to Vocabulary, Arithmetic, and Information. The last three are strongly associated with educational experience. The probable factors in this pattern are: poor ability in these areas makes for the identification of poor educability; and, conversely, poor educability builds an inadequate competence in these areas.

A substantial proportion of these retarded achieved some IQ scores over 80. This proportion ranges (in the major sample studied) from 20% on Binets given before the ninth grade to 69% on Wechsler Performance scales administered during the ninth grade. On the other hand, 93% of the Ninth Grade Study group had at least one IQ below 80.

Apparently, a substantial number of the retarded are not reliably and permanently identified by any single IQ. The IQ is related to retardation, but by no means accounts for all of the variance in the diagnosis. The remainder of this chapter deals with some of the other variance, sometimes by implication.

School Achievement

Since performance against the school achievement criterion is the primary definer of retardation in school-age people, it might be expected that Project 681 would find itself dealing with students who show poor school achievement. The three measures of achievement which were observed were performance on the job, achievement test scores, and teacher's estimates of achievement level.

The matters related to school achievement which could be observed on the job were biased by the job placement system. Analysis of the worker traits demanded by the jobs on which these retarded students were placed through Project 681 shows that only a few were placed on jobs which required a substantial grasp of the three R's. Yet, there are anecdotes which indicate that the correlation between reading in school and reading on the job is not perfect.

In an occasional case, intensive academic tutoring can make the difference between failure and success on the job. This tutoring has been most effective when applied to the written material encountered on the specific job, and when applied to such entry barriers as driver's license applications and armed forces examinations.

A problem is encountered in analyzing tested achievement in this population. In general, retarded people do poorly on any test, sometimes for reasons unrelated to the attribute which the test purports to measure. This seems to even apply to standard achievement tests. Then too, the standard tests are geared to grade levels which are inappropriate to the age at which these students are tested. The result is that a seventeen-year-old retarded student might be taking a fourth grade level Iowa Achievement Test. With this discrepancy, the test norm's limited grade range is easily violated. The chance score factor and the truncation of the norm's lower range are also significant, as has been shown by a study of random answers to the Iowa test (Rainey, 1964). Thus, the tested achievement of the mentally retarded must be viewed with some caution.

The modal tested reading grade level of retarded high school students in Minneapolis is the fourth grade. The distribution of scores is fairly narrow. On the lower end, a student is untestable or (since the norms are truncated) may get a spurious score. A very few of the retarded test above the sixth grade level.

The teachers of these students were routinely asked to estimate the achievement level shown by these students in their daily work. These estimates tended to be higher than the achievement test scores, but the mode was still in the fourth grade. The distribution was wider, with more representation in the upper grade levels.

Within this population, the IQ does not predict the tested achievement with significant accuracy. Since the population represents a restricted range of both IQ and achievement, this should be expected. (The situation is analogous to that of the Miller Analogies Test and graduate college grades; the Miller has moderately good ability to predict failure in graduate training, but does not show correlation with grades in the graduate school.)

The teacher's estimate of achievement is correlated to the current Wechsler Verbal IQ, at the .001 level of significance in a sample of 125. The Binet IQ does not predict the teacher's estimate or achievement test score, nor does the Wechsler Verbal IQ predict Iowa scores.

In view of what will be discussed later, it is interesting to note that there is a significant relationship between the student's area of residence in the city and the academic achievement reported by his teacher.

In summary, there is a substantial difference between the academic achievement of these educable retarded students and the achievement of their age peers in regular class. The distribution of the achievement of the retarded students does not much overlap that of regular class students.

Management Characteristics

The point was made above that identification as mentally retarded is related to the observed ability of the student to acquire academic learnings, and also to "some aspects of school behavioral management."

The management characteristics of these students have been systematically investigated by Project 681, and have been organized into a set of prevocational traits. The areas covered are: appearance and grooming, modes of behavior and behavior traits, group relationships, instructability, response to rules and correction, and comment on attendance and achievement. These areas have some coherence, since their single numerical score (consisting of the area scores added together) has some predictive validity. This prevocational trait rating has furnished our index of school-management-related behavior.

The management characteristics of these students, as reflected in the rating scale scores, are related to the influence of the family upon the student's educability. It appears that this family influence largely determines the behavior. Students from unsupportive or pathological homes tend to have poor prevocational traits. Students from supportive or average homes tend to present fewer management problems to their teachers.

On the other hand, the student's school-management-related behavior does not seem to be much determined by his emotional status. These prevocational traits are almost completely independent of emotional abnormality, unless the abnormality is quite severe. A student who shows severe emotional disturbance is likely to show poor school behavior. However, moderate emotional disturbance seems not to earn an especially poor trait rating, and normal emotional status does not prevent a low rating of prevocational traits. In other words, management-related behavior is something different from emotional adjustment. These behaviors are an important and independent dimension in the diagnosis of mental retardation.

These management characteristics are related to the student's achievement. The trait rating has a strong positive relation to both the teacher's rating of reading grade level and the tested reading grade level. On theoretical grounds, a circularity could be expected here. That is, poorly achieving students would likely be rated low in their prevocational traits, and students who are viewed and handled as management problems are likely to be depressed in function.

If a retarded student carries an above average management trait rating, he is generally considered by school personnel to be working up to capacity. About half of those with below average ratings are considered to be under-achievers by the school personnel. This is especially interesting in the light of the project's finding that most of the retarded students have problems which impede their achievement.

Ability does not seem to have a direct relationship to trait ratings. The ratings are not contingent upon either Binet or Wechsler IQ's, nor does there appear to be a substantial relationship between the trait rating and other estimates of ability.

The behavior traits in this population are definitely associated with employability. Part of the evidence for this statement is the content of the trait rating, of course. Additionally, follow-up of these students on the job shows that those who are employed carried higher ratings than those who are unemployed. Those with above average trait ratings tend to survive the (fairly technical) trade training at Vocational High School.

In summary, it can be said that a rating of prevocational traits, which may also be called management-related behavior, is a valuable avenue to case understanding. Independently of the student's ability and emotional status, it measures behavior which has meaning for achievement and management. It is directly related to employability. In terms of population description, traits of the kind covered by the rating scale are at least as significant as are abstract measures of ability. The rating is associated with a good deal of the variance in the need for special education, and thereby with the variance in the nature of retardation as identified against the educational criterion.

Sociological Identity

A large number of factors is associated with these students' sociological identity. The most convenient index of this identity is the area in which the student lives. The students' subcultural identity was also established, but this is so closely tied to the family's influence upon educability that it seems to be a superfluous concept. The kind of sociological identity which is indexed by area of residence, however, is readily shown to have important implications for special education and rehabilitation.

Minneapolis lends itself rather neatly to sociological-zone analysis. Much data are available on this, compiled in a publication of the Hennepin County Health and Welfare Council, Profile of Minneapolis Communities (1964). The city has a single major center, with concentric sociological zones in the classic pattern. Using one of several indices, the (central) area of sociological disadvantage can be readily identified. Twenty-seven percent of the city's juvenile population lives there; over half of the special class population lives in that disadvantaged area.

A comparison of different kinds of retarded population, mapped in regard to the area of sociological disadvantage, shows some interesting contrasts. There seem to be two distinct kinds of retarded populations, defined by their service needs rather than by diagnostic category. Though the two populations are not entirely dissimilar, they can be separately identified by agency caseload, and they do form contrasting geographic distributions.

The largest population, comprising perhaps 90% of the retarded, consists of those who are found in the public school special classes. "Garden variety" kinds of retardation, with evidence of multiple causation, predominate. There appear to be familial patterns of adaptability in many of the cases, but single-gene-defects and clear clinical types are infrequent. This kind of retarded population has a strong sociological identity, and most of it occurs in the disadvantaged area of the city. The population of the state institution for the educable retarded follows this pattern, incidentally.

The other retarded population, comprising perhaps 10% of all the retarded, consists of those who are found in state hospitals, in community programs for trainable retarded, and in day activity programs. Clinical types are frequent. This kind of retardation is largely independent of sociological disadvantage, and it "can strike anywhere." It arises randomly on the juvenile population base, and is scattered throughout the city. In a reasonably complete tally of all known cases of mental retardation in Minneapolis, age range about ten to seventeen, roughly 7% of all the retarded are of this kind.

The academic achievement of the educable retarded is significantly contingent upon sociological identity. The same is true of IQ. The direction of this contingency is not necessarily what might have been expected. The students in the disadvantaged area of the city tend to have higher achievement and IQ's than do those in the peripheral middle-class area. The apparent reason for this is that, of two students with equal IQ and achievement, the one from a disadvantaged area of the city is more likely to function in a retarded manner. This is additional evidence for the thesis that sociological factors account for some of the variance in retardation.

Some sociological indices operate to obscure the nature of retardation. For example, retarded students move more frequently, and are absent more often, and have a higher delinquency rate than do regular class students in general. Some of this is artifact rather than essence of retardation, as is evident when regular class students are matched to special class students by area of residence. It can then be seen that, while the retarded move frequently, so do their neighbors. Some of the characteristics of the retarded might more accurately be attributed to their sociological identity. The retarded often come from high-mobility, high-absentee, high-delinquency neighborhoods. Of course, these factors also make for poor educability, and thus probably increase the incidence and severity of retarded functioning. On balance, the retarded students are worse off than their neighbors in some of these characteristics, but not enough worse off to account for their being retarded. Sociology accounts for some, but only a part, of the variance in mental retardation.

There are some circumstances in these cases which are tied to the areas of the city, but which are not personal characteristics of the student. When the school districts are divided by socio-economic status (SES), differences in pupil management are apparent. The teacher's rating of the students' prevocational traits is lower in the low-SES districts than in the districts of high or medium SES. More students in the medium-SES districts are recommended for training at the Vocational High School, and this seems to be independent of ability and management factors. More students in the high-SES and low-SES districts were recommended for transition out of school through Project 681 at the end of their ninth grade.

The city of Minneapolis has a population which is about five percent non-white. The special class population is about 20 to 25% non-white. The races show no significant differences, in the special class population, with regard to the several measures of ability. Neither is there a difference in racial proportion in special class in the disadvantaged versus the peripheral areas of the city. Family breakup and mobility are high among the non-white retarded. The races do not differ in judged academic potential, but their teachers report that over half of the non-white students in special class can understand only after repeated instruction and demonstration; this may reflect a learned role of passive resistance to the dominant culture. Racial identity is inextricably embedded in the sociological matrix. The evidence in the mentally retarded population seems to show that non-white students occupy a more disadvantaged position than do their neighbors.

In summary, a large number of factors is associated with the sociological identity of the mentally retarded. These people are, as a group, atypical in their sociological characteristics. Further, sociological factors have a rational association with the nature of the retardation in many of the cases. There seems to be a fairly coherent sociological complex, associated with cultural disadvantage, one aspect of which is high incidence and enhanced severity of mental retardation.

Family Identity

Since the family identity of any student is interwoven with his personal identity, one might expect that many of the characteristics of the retarded would be related to their families' characteristics. This expectation is readily fulfilled.

Some of the formal indices of family circumstances might be cited to illustrate the ways in which retarded adolescents' families differ from those of their regular class peers. The most striking index is the rate of family breakup. Among regular class students in Minneapolis, 8% experience the breakup of their families through death of a parent, divorce, or separation during their twelve years of schooling. Among the special class population, 28% of the students experienced this breakup during their first nine years in school. Forty percent of the special class students change address three or more times in nine years, in contrast to only 13% of regular class graduates in general, and 26% of the special class students' neighbors. One-fourth of the special class students have siblings who are also in special class, in a city where the base rate of such placement is less than 2%. Very definitely, the families of the educable retarded tend to be atypical. This atypicality may obscure some of the variance within the retarded population.

Judged on a case-by-case basis, a minority of the retarded come from families which are as supportive of the student's educability as is the average home. Nearly a fourth of the students come from pathological families which are actively anti-school, or have relationships destructive of the student's personal integration, or which interfere with school acceptance or attendance. Thirty-five to 40% of the families are passively unsupportive.

Three-fourths of the educable retarded appear to be in need of family casework beyond the kind which is routinely offered to every student. A substantial number of them need aggressive casework at agency initiative, since their families are not the kind which can carry the initiative or show sustained motivation for help. A few are lost causes from the social casework standpoint in that they would effectively reject help. This still leaves a large number, perhaps half, whose educability might be improved through the application of family casework procedures.

The emotional status of the student seems to be related to the family's influence upon the student's educability. Indeed, this is one definition of how the influence is exerted. (The student's school-management-related behavior, uncorrelated with emotional status, will be recalled as another avenue of the family influence.) Only a tenth of the students from families which give average support, in contrast to half of the students from unsupportive or pathological families, show moderate or severe emotional disturbance.

Some of the variance of the need for special education is common to both family and sociological factors, an expected consequence of the interrelation between sub-culture and family dynamics. Some examples of this are: family geographic mobility, school absenteeism, family instability (more families in the disadvantaged areas are broken).

There is an interesting pattern in the relation of IQ to family influence upon educability. Very few of the students from pathological homes have IQ's below 70, indicating that they are in enough educational trouble to require special education even though their IQ's are not very low. Passive unsupport by a family is not enough of a factor to show this pattern.

Two significant conclusions can be reached regarding family influence upon educability among the retarded. The first conclusion is that such influence does exist and is substantial. A judgment of its nature can be made upon the basis of case study, and this judgment shows internal consistency and some predictive validity. The second conclusion is that this family influence may be a potentially treatable aspect of retardation.

Case Outcome: Drop-out

For this report, the school drop-out of special class retarded students was studied by means of two major samples. The first of these samples consisted of all students who left the special classes of the Minneapolis Public Schools by drop-out or graduation over a three-year period. As was reported in Chapter 6, 65% had dropped out before completing the twelfth grade.

The second sample studied in terms of drop-out was the Ninth Grade Study group described in Chapter 9. This group was first identified at the ninth grade level in order to make it as representative as possible and to forestall loss from the sample through pre-identification drop-out. Follow-up of this sample is incomplete, since they were in eleventh grade at the close of Project 681. However, about 30% had dropped out before completing their tenth grade, and this enabled a study of those characteristics of the mentally retarded which are associated with early drop-out from school.

The figures just quoted, 30% by the end of the tenth grade and 65% before the end of the twelfth, represent the drop-out situation of a particular city. The proportion who drop out from other school systems varies. The few reported figures, however, are usually on somewhat the same order. The mentally retarded, for some reasons which are clear and some which are not, are more liable to drop out than are regular class students.

At least some of the special class students drop out because the schools have nothing further to offer them. Of the retarded in this study, over half of those judged to have less than twelfth grade academic benefit potential, and all of those judged to have less than twelfth grade social development potential, were later found to have dropped out. On the other hand, about 20% of those judged to show potential for academic advance and social development throughout a twelve-year program dropped out before the end of their tenth grade.

Age is a significant factor in school drop-out. In Minnesota, a student may not drop out without permission before he is sixteen years old. The 30% drop-out reported here took place, usually, during the student's sixteenth year.

Sex seems not to be a significant factor in early drop-out. Twice as many boys as girls drop out, but then, there are twice as many boys as girls to begin with. For each sex, early drop-out rate is the same.

The question of whether the less able students are the first to drop out does not lend itself to a simple answer. Drop-out in relation to judged potential was mentioned above. However, drop-out is not related to Binet or Wechsler Verbal IQ, when the bias of selected age at testing is controlled. There is some evidence that the dropouts tend to have less intra-intellectual variability than do those who are retained; they have less verbal-performance IQ discrepancy, and they have a lower incidence of intra-intellectual specific defects in the areas of language, visuomotor perception, and abstract intelligence. Inspection of the drop-out cases shows a substantial number of students who are retarded by any criterion of life competence. More of them are judged to be low in both native and functional intelligence, though most of the students low in only one of these judgments did not drop out.

The dropouts are poorer readers than their classmates. They tend to have lower prevocational trait ratings than those who were retained, and so perhaps pose more of a management problem. More of the dropouts had been considered under-achievers by their counselors.

In contrast to its association with other factors, residence in the disadvantaged area of the city does not predict early drop-out from special class.

The formal status of the family, whether broken or intact, is not related to drop-out among the retarded. This, in spite of the strong relationship between family status and drop-out from regular class. The abnormally high base rate of broken families among the retarded may obscure an existing relationship. Other readily-quantified family data, such as number of address changes and number of siblings in special class, do not relate to drop-out to a significant degree. However, the judgment of the family's influence upon educability is a significant determinant. Almost all of the early dropouts come from families which are unsupportive or pathological.

Absentee rate in elementary school is not related to drop-out risk. Absentee rate on the secondary level, though, is significantly higher for the dropouts. This finding is consistent with the assertion that many students who drop out at age sixteen had psychologically dropped out much earlier.

The mentally retarded who leave school early are definitely not those who are best fitted for transition to employment. One-fifth of those with potential for competitive employment are early dropouts, in contrast to two-thirds of those whose long-term potential is for sheltered employment.

The early dropout from special class for the educable retarded can thus be described as poorly fitted for life without further aid, even in comparison with other retarded adolescents. He tends to be uniformly dull, rather than retarded, because of specific defects. He probably has an unfavorable family situation. He has presented somewhat of a management problem in school, and carries these same inadequate prevocational traits into the non-scholastic world. He, at age sixteen or seventeen, is rather young for ready absorption into the labor market. He has been a spiritual dropout for some time before actually leaving school. Some of his characteristics would have enabled identification as a student with a high drop-out risk. He has, it may be recalled, a number of possibly treatable educational handicaps, and would be advantaged by additional maturity. A few years ago he would have missed the rehabilitation referral system by early drop-out, and would have been regarded as having low feasibility for employment. Even in the present state of rehabilitation technology, he constitutes a difficult case.

Case Outcome: Employment

After the school years, the criterion of life competence is structured in terms of economic and social competence. It may fairly be said that a person who demonstrates economic and social independence is not retarded as an adult, regardless of whether he was retarded during his school years. The identity of the population reported here is in terms of the educability criterion. Hence, their identity should blur when they move into a different criterion-circumstance. The extent to which their identity is blurred, as seen against the employability criterion, can be examined in the light of follow-up.

In Chapter 2, one conclusion from a study of the literature was that a substantial number of the educable retarded are able to achieve some degree of employment in adulthood. The limited time span of Project 681 prevented a long-term follow-up of project clientele, so that the findings of the project relate to very early adulthood only. Nevertheless, some findings can be reported. Follow-up of project clientele is reported in Chapters 12 and 13, and follow-up of pre-project retarded youth is reported in Chapter 6.

Quite a few retarded youth attain employment. The first post-school years are a time of shakedown and adjustment, evidently more so than for the non-retarded. The pattern resembles that of disadvantaged youth in general, such as are found among minority groups and in sociologically disadvantaged urban areas. The unemployment rate is high, and there are relatively long periods between jobs and before getting the first job. This last-mentioned gap, between school and job, is shortened by the provision of school-rehabilitation transitional service.

Holding the student to maximize his school benefit and to increase his maturity has the effect of increasing his employability. The adequacy and appropriateness of the curriculum during that holding period is probably a factor, but Project 681 did not research this matter. Supportive services, such as parent counseling, help the student's employability. Job placement has a direct beneficial influence. An in-facility evaluation before the end of school enrollment enables a more rapid and more effective entry into the job market.

The first jobs, and to only a slightly lesser extent the later jobs, of these people tend to be unskilled and semi-skilled occupations. In this, retarded youth somewhat resemble their fathers, so that a family pattern may be as operative as is individual direction. Naturally enough, very few of those who are retarded during their school years work on a skilled level. The main areas of work are service, operative, and labor occupations.

Over time, the employed become more employable and the marginal become less employable. The definition of the retarded population against the employment criterion of adult retardation sharpens over time. This is analogous to the definition against the educational criterion.

The long-term vocational adjustment of the retarded was not elucidated by Project 681. From other reports, it is clear that the maximum employability of the retarded is reached, on the average, after eight to fifteen years in the job market. If the shakedown process described above continues beyond the first very few years, then the employable retarded should stabilize at around the one-half or one-third proportion, while the remainder stabilize in dependency.

Attitude toward work and toward authority, and general work readiness and personal stability, are critical factors in the employability of the retarded. This is detailed in Chapter 12. The relationship of this to secondary level curriculum and to the student's management characteristics is obvious. If the retarded are so trained as to show personal responsibility in relation to work, much adult retardation is prevented. The skill of a particular occupation is helpful but is not as critical as is general employability.

About a tenth of the educable retarded need a long-term or lifetime berth in sheltered employment. This is not a new problem, but it is newly coming into clear focus. In the city of Minneapolis alone, with a total population of about a half million, each year moves at least fifteen to twenty sheltered-potential cases into the labor market. These retarded youth are in competition with the non-retarded sheltered work candidates, and with perhaps twenty-five retarded youth from the Minneapolis suburbs and from St. Paul, for those few sheltered work stations which become available each year. The situation is worsened by the fact that Minneapolis is a state center of rehabilitation resources, thus laying additional claim against the sheltered work which is available. The sheltered workshops, particularly those which offer long-term employment, are not expanding significantly. The inevitable consequence is that many retarded youth who need sheltered work cannot be so placed, and those who prove least productive after being placed tend to be crowded out of the shops by equally needy but more economic retarded people.

Another twentieth or so of the educable retarded population need a long-term placement in day care. Here again, there are not enough day care resources to meet the need. The technology of day care is not well differentiated from that of social development, and this clouds the picture regarding the permanence of day care and even the nature of the resource. Yet, it is clear that many of the retarded can live trouble-free lives in the community only if they have day occupations, and a few of these people cannot be employed even under sheltered circumstances.

The labor market is in ferment. If present trends continue, the marginal and atypical person will have less and less of a place, partly because he will find fewer jobs which he can handle and partly because the job application process is becoming more rigid and abstract. The effect of this will be to massively increase the proportion of the educable retarded who cannot be competitively employed. In the future, therefore, more of the retarded will need long-term sheltered work placement.

Meanwhile, many of the retarded are able, with transitional help, to move from school into employment.

Case Outcome: Social Competence

Social competence has several aspects in addition to the aspect of employment. Independence of living includes self-support, freedom from crime and delinquency, the effective use of leisure, personal satisfaction, and the fulfillment of citizenship duties and other aspects of social competence. Project 681 developed information on the independence and law observance of the educable retarded, again detailed in Chapters 6, 12, and 13.

Many of the educable retarded have prolonged and increased dependency upon their families. This most often happens in the less competent families, though there naturally are many exceptions to this. In this population, there are many socially dependent families, families which often are in their second and third generation of welfare support. However, welfare is an index rather than the substance of the family inadequacy. The kind of family which contributes most to the variance of multiple-causation retardation is a family which is broadly inept at dealing with life, and which operates in a climate of social disadvantage. This is the kind of family upon which many of the retarded are dependent.

In exception to this, there are some dependent retarded in quite adequate families. This kind of retarded person tends to be the adventitiously-arising kind, retarded for reasons other than the continuation of family constitutional and cultural patterns, scattered randomly about the city, and (though not uniformly) low in intellect. There is often a strong emotional-adjustment component in these cases. For many, there is a pattern of child rearing which, in relation to a less handicapped child, would be called over-protection.

There is another kind of social dependency which occurs in a small fraction of the retarded population. This is incarceration in a correctional institution.

There are many more of the retarded who are in occasional trouble with the law. It is difficult to say how the retarded individually compare with the non-retarded in regard to delinquency, since two-thirds of the educable retarded live in high delinquency areas of the city. The delinquencies of the retarded may be a feature of their neighborhoods rather than a feature of retardation.

Boys have twice as high a delinquency rate as do girls, both as juveniles and as young adults. The juvenile delinquency rate of educable retarded boys in Minneapolis is 50% by age eighteen, in contrast to 37% of non-retarded boys in the city. The rate for retarded girls is about 27%, in contrast to 11% for non-retarded girls. The delinquency-related residence of the retarded should be remembered in interpreting these figures. The limited balancing data available point to the conclusion that the retarded are only slightly, if at all, more delinquent than are their neighbors.

Shoplifting, curfew violations, and auto theft figure high in the juvenile delinquency of the retarded, as they do among the non-retarded juveniles. As young adults, they are more often involved in drinking, moving traffic violations, and contributing to the delinquency of a minor. As with employment, delinquency shakes down over time. Those who have juvenile delinquency records are likely to have delinquency records as adults, though to a lesser extent. Those whose juvenile records are clear are not likely to show adult delinquency. Those with a history of minor juvenile delinquencies are not likely to commit serious adult crimes.

The customary formal "predictors," such as IQ and achievement, appear not to have a stable relationship to delinquency in this population. On the other hand, those students who drop out of school and those who express dissatisfaction with their education are likely to be the ones who are delinquent as juveniles and as young adults.

Marriage is an aspect of social competence which may be treated separately from the foregoing aspects. The largest single occupational grouping in the nation is the occupation of homemaker. Since most of the educable retarded are not very severely retarded by any single criterion, it would be expected that most of them would assume marriage responsibilities. In their early adult years at least, the girls are younger at marriage than their male counterparts. There is some evidence that the girls tend to marry men who are less able than the average, or at least less economically competitive. In Minneapolis, the educable retarded boys diffuse out of the disadvantaged neighborhoods more rapidly than do the girls, indicating a stronger tendency to migrate out of this subculture than to marry out of it.

In general, it seems that quite a few of those who are mentally retarded during their school years are able to function adequately in society during their adult years.

Population: Summary

The characteristics of retarded people have just been described viewed in terms of several indices and against the criteria which apply in education and in early adulthood. It might be well to repeat here that the foregoing description is that of responsibly diagnosed retarded people.

The largest group who carry the label of mental retardation are those who are so diagnosed against the educational life criterion. It contains mostly cases of multiple causations, and classic cases of clear organic-physical identity or single-gene-defect are rare.

The severity of retardation is a function of the life situation with which the individual is faced. This varies with the social-technical context and with the age of the person. A child who is retarded in the educational context may disappear from the rolls of the retarded when he leaves school and moves into a different criterion complex.

Social and environmental factors may play primary roles in the case. Adverse family influence and sociological disadvantage act to increase the incidence and severity of retardation. A minor degree of mental deficit, perhaps to the dull normal level, may result in retardation if compounded by other problems, and an actually deficient person may be further reduced in function in the same way. A mentally retarded person may not be mentally deficient.

The IQ score, taken by itself, has utility only if used as one of many case data. There is no IQ demarcation between retardation and normality; most people with IQ's in the range found in the retarded population are not retarded, and most of the retarded at the secondary age level have IQ's well into the borderline or dull normal range. Within the retarded population, the IQ does not seem to be much related to differential life performance, except in the lower edge of the range. Case outcome is very poorly predicted by the IQ or by a similar single datum. The IQ is unstable in this population and rises and scatters with time. Because of all this, and because of stereotyped expectation, an IQ which is not accompanied by broad case study can be grossly misleading. Project 681 has demonstrated such a case study system.

Many of the problems of the mentally retarded may be treatable. For this reason, society is better served by a definition of mental retardation which does not rule out treatment. It is not necessary to change the name of the label, but only to change its categorical pessimism and complete the diagnosis with a statement of what the problems are and what can be done about them. If retardation is not by definition incurable, and if function-depressing factors are identified in the given case, then society can carry out constructive case action.

PART III: THE SERVICE PROGRAM OF THE DEMONSTRATION UNIT

Chapter 12

SERVICES PROVIDED BY THE PROJECT

Chapter 5 outlined the organization, the physical setup and the general program of the demonstration unit. This chapter describes in detail the actual services rendered by the project to its clients. These include evaluation, training, placement, counseling, and follow-up.

By the end of the project this program had been developed to the point where it was an accepted and well-established part of the school system and of the pattern of community rehabilitation resources. Individual working relationships had been established with school and agency staff. Exchange with other facilities of ideas, program and planning had been promoted.

Through experience the project staff had learned many ways of working effectively together. Evaluation and planning techniques had been developed and new areas of training added. Improved methods of working with students and of viewing their needs continued to evolve. Students entering the project in its final year had many more possibilities before them than those who entered when the project began. The morale of the staff was good and improved as the number of options of service in the program increased. In attempting to work with a population such as the project served there is always danger that the staff may become depressed. This appeared to be largely counteracted by the close group feeling that developed among the staff (which is a very strong argument for locating such a project in one facility), the freedom of individual staff members to develop program, and the success of the placement specialist in producing movement of the students.

As previously discussed in this report, no pre-screening or selection methods were used, and attempts were made to serve all retarded students referred. Orientation of the staff was on assessment of the student's situation and needs rather than on whether or not he fit into the project's established training program. This, of course, promoted and necessitated program development and the utilization of all types of resources.

As the project developed, the regular staffing conferences on individual students were attended by more and more workers from other agencies who were also involved with the case. The number of contacts with parents also increased. Different staff members tended to perform different functions on different cases. The longer the staff worked together as a group, the more effective it became in utilizing the strongest assests of its individual members.

Distinctions in practice between evaluation, training and job placement were not clear-cut. For example, a student placed on a paid competitive job might actually be there primarily for training. All students went through an initial period of evaluation, but evaluation as such did not end at that point. Nevertheless for purposes of discussing services, it is useful to make these distinctions.

Evaluation Services

Students referred to the project went through an initial two-to-three-week period of prevocational evaluation. Typically, there were about ten cases in evaluation at any given time. The evaluations took place in the two work laboratories and in the classroom. They consisted of group observation and testing, tryouts on prevocational tasks and on simulated jobs.

Although the evaluation program was modeled after other rehabilitation programs, it differed somewhat from those of other facilities because it was operating within a school system. In over half of the cases seen for initial evaluation, a return to or further tryout in some school program was recommended. Most of these students returned to the project again when they had completed the program recommended or whey they were no longer able to benefit from it.

The evaluation program was designed to enable a broad, fresh re-assessment of the student at a stage in his life at which this kind of re-assessment was not only more possible but also vital to sound planning for his future. The program made use of the traditional methods of educational diagnosis, social diagnosis, and psychology. To these traditional methods, the program added a large proportion of what might be called "situational testing" in which the evaluation tool is not a test or an interview, but is a fairly complex real-life situation. The attempt was made to use the situation as a tool, with the evaluator as a part of that tool. The traditional methods and the situational methods were then combined into a single educational-vocational summary with recommendations for handling the case.

This may sound like nothing more than ordinary, sound, responsible case management. To a large extent this may be true. On the other hand, our experience with the students we have seen has confirmed that an evaluation of this scope has not usually been done. One reason why this is so is that most schools have neither the time nor the staff to do it. Another reason is that such an evaluation requires a physical circumstance in which such situational testing may be set up and executed. Such a physical plant is both expensive and unlike the traditional school. A final reason is that the technology itself, the technology of "prevocational evaluation," is new.

Other factors also need to be considered. The students seen in the project were in their late adolescence, a time when their characteristics were more differentiated, and more distinctly formed. Certain statements could be made with greater precision. One might be able to say of an eight-year-old that he was academically retarded at that point and needed special class placement. It would not be possible to predict his program needs at the secondary school level, and one certainly could not say much about his specific work skill potentials and his occupational outlook. However, by the time he was sixteen years old and referred to Project 681 decisions had to be made about his high school program, either by him or for him, and it was possible to make recommendations with a greater degree of certainty.

Illustration of a typical student's day during evaluation. Outline of the program of a typical student may clarify the character and sequence of the evaluation process. It should be remembered that a good deal of information was available about the student when he arrived at the project facility. His school counselor had completed a referral form which included a statement on why he was being referred and a resume of the present stage of planning for and with him. His special class teacher had rated him on personality traits, behavior and achievement. The shop or home economics teachers had submitted a supplementary rating. The school social worker had prepared a summary of the social history information on the case. (See Appendix 2 for copies of these forms.) The student's school cumulative record file was transferred to the project office when he reported for intake. A project worker had interviewed him in his home school, reviewed the case with the school staff, and had seen the parents, usually in the home. This liaison worker prepared a summary of the referral information which was then distributed to the rest of the project staff.

During the evaluation period, a period which lasted a minimum of two weeks, the student followed a daily schedule which went something like this:

> Two periods were spent in Laboratory I, the mechanical-manipulative laboratory. Here he was faced with a series of tasks which sampled his aptitudes, interests, and skill levels in mechanical and manipulative areas. He might have been sorting bolts according to size, assembling a water meter, or taking the Minnesota Spatial Relations test. He punched in on a time clock when he began and when he completed the session, and the lab supervisor treated him somewhat like an employee. The student was observed in his relations with the other students and with the supervisor. The quality and speed of his work was noted, and he was rated on such job-related aspects as appearance and grooming. (See Appendix 2 for work laboratory rating forms.) The purpose of this approach was to test him out in a situation which was something like a job and which provoked expression of characteristics important to employability.
>
> The student might spend the next two periods in a "classroom." Here he might be given a tape-recorded version of the Multiphasic Personality Inventory, take the Iowa Achievement Tests or the Oral Directions Test, or he might watch a movie giving occupational information. Here, again, the numerical scores of tests would be only one of many kinds of information recorded; a number of employability traits would be noted as he was observed participating in these activities.
>
> After lunch, the student might meet with the project's job placement specialist for a discussion of employment. All

students enrolled at the project at a particular time, including those who were in training and those who were on part-time jobs as well as those just entering, assembled for this discussion. As students who were actually employed talked about their experiences the matter of employment seemed to become more real.

Next, our typical student might spend two hours in the service-clerical laboratory (Laboratory II). This was like Laboratory I in that it sampled work behavior, this time in the service and clerical fields. The student might have taken a time-telling test, filed by number, counted money, stuffed envelopes, ran a sewing machine, or worked with commercial kitchen equipment. Another set of ratings would be made of the student's work-related behavior in this context.

The student would spend the last period of the day in the classroom, perhaps finishing up one of the group tests such as the Picture Interest Inventory. This would have completed his day.

At some time during the day the student we were following may have been drawn out of his activity sequence by one of the project's psychologists. One of the Wechsler tests and a Bender would have been given as a minimum battery.

Occasionally, a student in initial evaluation was placed for a few hours or a day in a competitive job station. This was done to get an idea of how he might function on an actual job and to get a brief evaluation from an employer.

Findings from all aspects of the project's program as well as the background information would be discussed at a staff conference held at the end of the student's second week at the Center. Case status, dynamics, and possible courses of action would be explored.

Validation of evaluation techniques. Data were gathered regarding several published tests and on tests and techniques developed in the project itself. Commonly used tests, which were run for experimental purposes on project students, included the Wechsler and Binet individual intelligence scales, the Bender Visual-Motor Gestalt, the SRC Primary Mental Abilities tests, the Revised Minnesota Paper Form Board, the Bennett Mechanical Comprehension, the Personnel Tests for Industry - Oral Directions Test, the Iowa Tests of Basic Skills, the California Picture Interest Inventory, the Minnesota Multiphasic Personality Inventory, and a form of Bolduc's Social Value-Need Scale.

Results from some of the measuring devices as they relate to outcome factors is presented in the following chapter. However, in general, prediction of case outcome by test scores is not a fruitful approach for this population (see discussion of *Construct Validation* in the following chapter). This does not mean that these tests are of no use or that retarded students' responses and performance on them is of no importance. The very fact that tests of this type are so widely used for selection by personnel departments, employment services, civil service commissions, the armed services, and by many training schools makes them important to the retarded because they can become barriers from jobs which they can actually perform.

The project continued to work on many of the tests listed above and developed norms on its own clientele. In individual guidance, any given test score was used as simply one item of information to be considered and evaluated. In the area of interests, some analysis has been done of the Picture Interest Inventory, and the project has also developed and revised an interest-ranking scale based on actual jobs of project students (see Appendix 2). One aim of the project's continued work with group testing is to make recommendations to school counselors on testing programs as they may relate to special class students.

In the main area of prevocational evaluation, beyond the standard types of tests, the project has continued to accumulate data on different methods and techniques. A technical report: "Predicting Employability: Validation of Selected Indices" was issued by the project in March, 1964. Plans are made for a more extensive analysis, and information has been systematically recorded and collected for this purpose. It is recognized that this kind of study of prevocational technology as it develops must be a continuing part of any evaluation program. Some revisions have been made in the project's program and future modifications are expected.

There is much need in the field of prevocational evaluation for communication and the sharing of method and experience among professional people doing this work. The project attempted to promote this kind of exchange. In March, 1963, it organized and sponsored a conference on the technology of prevocational evaluation. Theoretical and reportorial papers delivered at the conference were bound in mimeo and distributed. The conference participants represented a score of agencies from all over the state. Again in March, 1964, the project and the Minneapolis Rehabilitation Center jointly sponsored a second conference on prevocational evaluation. The project and the Minneapolis Rehabilitation Center have continued to work closely together, and the project has also recently worked with the St. Paul Rehabilitation Center in the development of its evaluation program for students from the St. Paul Schools.

Training Services

Training within the project itself took place in the two work laboratories and in the classroom. The cafeteria of the high school in which the project was located was also used as a training station.

Training possibilities within the project continued to develop. In the work laboratories students were given individualized assignments, and areas were expanded or developed in response to the kinds of jobs available. At the same time, common factors such as work habits and attitudes, grooming and personal cleanliness, persistence and stamina were emphasized. Occupational related group work in the discussion sessions was continuously expanded. Individual tutoring programs aimed at specific purposes were developed as needed by the students.

The mechanical-manipulative work laboratory. General aims of training in the mechanical-manipulative laboratory included:

1. Tolerance for work routine
2. Work comprehension and judgment
3. Appreciation of work standards
4. Improvement of manipulative skills
5. Increase of self-confidence and self-understanding
6. Development of self-concept as a worker
7. Appreciation of work values
8. Work-appropriate social skills
9. Skills of specific jobs

Instruction and supervision were adapted to the individual differences and needs of the students - in some cases supportive and permissive and in other cases highly demanding and limit-setting. Equipment in the laboratory included standard general wood and metal working machines and tools, tools and machines specialized to certain mechanical and repair occupations such as welding and auto service, and work tables. Examples of specific kinds of tasks:

1. Projects of construction or repair (examples: wooden key holder, game material for special classes, repair of lawn mowers and equipment of the project's lawn service).

2. Short-run and long-run individual simulated manipulative jobs (example: disassembly of obsolete school equipment).

3. Duplication of elements or the full range of actual jobs (examples: tire repair, bicycle repair, torch cut-up of metal scrap).

Students in training were scheduled to the mechanical-manipulative laboratory for general prevocational training or for a specific job-related program. In the latter case, the job placement specialist and the lab supervisor worked together in setting up an individual training program directly related to an employment opportunity.

The service-clerical laboratory. General aims of training in the service-clerical laboratory were identical with those of the mechanical-manipulative laboratory. Specific job areas in the laboratory included:

1. Foods - preparation
   service
   maintenance and clean-up

2. Dishwashing - bussing
   hand dishwashing
   machine dishwashing

3. Telephone reception - answering telephones
   answering service

4. Stock room - receiving and simple materials handling
   packaging, including rough wrapping and gift wrapping

5. Household - domestic services
6. Routine clerical - enveloping, mimeographing, duplicating
   copy machine operation
   collating and stapling
7. Simple clerical - filing, cashier-type work
8. Sewing - household
   power machine operation
9. Laundry - washing, hand and machine
   machine drying
   ironing, hand and mangle
10. Grooming (which was provided for all students)

Equipment in the laboratory included that necessary to cover the above areas including: stoves, refrigerators, dishwasher, training phones, cleaning machines and tools, mimeograph, duplicator, files, power sewing machines, washer, dryer, and mangle. Students in training were scheduled (as in the mechanical laboratory) for general prevocational training or for a specific job-related program, in which case the lab supervisor worked with the job placement specialist to develop it.

Classroom program. The classroom program for students in training was focused entirely on vocational adjustment. It provided a setting for group discussion sessions which were generally stimulated by problems brought up by students who were actually working. A primary function of the discussion leader, in addition to teaching occupational and prevocational information, was to serve as a group counselor in areas of job adjustment and personal and community responsibility. The teacher also provided individual instruction such as specific (to-a-job) remedial work and preparation for tests (drivers, military service).

Much resource material was developed and was gathered from other school systems and programs. New curriculum materials were tried out or evaluated to determine their usefulness for special classes in the school system. A proposal was made (but not yet carried out) to make a teacher position in the project a rotating (by semester) exchange position with the high school special class programs. An extensive work-related film library was developed, including films of project students working on jobs. The latter proved very useful and has been made available for use in some special classes in the school system.

The project was often involved in training programs in other facilities. Results from evaluation often resulted in recommendations for training in other community resources or in other programs within the school system itself. In all of these cases the project continued to follow students and to offer services later if they were appropriate. Coöperative planning was promoted and good working relations existed between agencies. Developmental movement of cases in "training" was encouraged - such as movement from school and project evaluation to a day care center, then to a sheltered workshop setting, and then, perhaps, back to the project for aid and support in competitive job placement.

A significant contribution to training methodology developed by the research staff of the project, "A Model for the Training of Specific Client Behavior Patterns," is presented in Appendix 3 of this report.

Placement Services

Almost all students who continued in the project for training were eventually placed on competitive jobs in the community for an actual work tryout. Job placement was not viewed as "find someone a job" but as an extension of the project's evaluation and training program. It was early and easily seen that just as evaluation could not be viewed as a once and forever determination, job placement could not be viewed as a once and forever solution to the needs of these students. Almost half of the students in the project who were given direct job placement were placed more than once to give them opportunity for experience in different work settings. Among the former project students who were followed in July, 1964, 114 cases had been given direct job placement. Fifty-four, or 47%, of these had been placed more than once and of these, twenty-five, or 22%, had been placed on jobs three or more times.

A broader concept of "placement service" rather than job placement needed to be developed. Cases could not be "closed out" simply because they were working.

Placement services were an integrated part of the total program. In discussing evaluation and training, mention has already been made of the use of films of students at work and of the job adjustment sessions conducted by the placement specialist with all of the students present (working and non-working). We have also noted the planning that transpired between the placement man and the laboratory supervisors in developing individual student programs for job preparation. Placement on competitive jobs provided a planned extension of both evaluation and training. Job placement was viewed as a very important part of a developmental process in movement toward adult adjustment and independence.

This view meant that efforts were made to place students on a variety of jobs for experience, to upgrade them through a series of jobs wherever possible, and to continue to work with them over a long period of time. It also meant trying to develop as much of a range of job stations and as many different kinds of placement programs as possible. For example, extremely cooperative and interested employers and stations that were somewhat under the control of the project (such as the school lunchroom and a kitchen in a day care center) were used for the most difficult cases that could not be immediately tried out in a competitive job station. Another innovation was that the project created placement opportunities itself by operating a lawn service. This was begun in the spring of 1964. The project purchased basic equipment needed, arranged the job schedules and supervised the work. Students working on the service averaged $1.25 per hour. This program was tried to explore possibilities of developing more training opportunities which would allow students to work under supervision of project personnel rather than under employers who would make fewer allowance for student learning problems.

Most of the students entering the project had no prior job experience. Their vocational interests were explored through discussion, tests and the interest rating scale mentioned above. However, it frequently was apparent that the students' vocational interests were very immature or essentially undeveloped. The students seemed to have had fewer incidental job experiences for pay than normal students do. The project, therefore, concentrated on getting them into jobs and encouraging them to perform the job duties as well as possible regardless of whether the particular job was one the student considered totally compatible with his interests. This approach is supported by the Minnesota Studies in Vocational Rehabilitation (Carlson, Davis, England and Lofquist, 1964) which found that there is no correlation between job satisfaction and job satisfactoriness, or in other words, no necessary relationship between how well a person likes his work and how well he does his work.

Types of jobs used. The classification of jobs presented below is based upon the major demands of these jobs as viewed by the project rather than upon the traditional job classification schemes. This was done because the traditional schemes are based upon a broader range of jobs than were experienced by project students, and hence they tend to lump characteristics which the project had to consider separately. Table 18 is based upon 184 competitive job placements that were made by the project since 1962.

Table 18

Job Placements of Project 681 Students Grouped by Major Worker Trait or Activity

Manual labor, physical activity, sustained effort		
Dishwasher	42	
Bus-boy	26	
Cleaner, pots and pans	11	
Bus-girl	11	
Maintenance worker	7	
Car washer	4	
Pinsetter	3	
Domestic aide	2	
Cleaner, cars	1	
Mail handler	1	
Fireman	1	
	109	59%
Social skills, public contact and travel		
Messenger	27	
Nurse's aide	8	
Food server	3	
Usher	2	
	40	22%
Specific skills, mechanical skill		
Cook's aide	7	
Driver	3	
Fry cook	3	
Car runner	2	
Baker's aide	1	
Shoe repairman	1	
Bicycle repairman	1	
	18	10%
Dexterity, manual production		
Laundry worker	6	
Assembler	3	
Candy packer	1	
	10	5%
Academic skills (math, reading, record keeping, money handling)		
Waitress	3	
Parking attendant	2	
Stock boy	1	
Service station attendant	1	
	7	4%

The large number of sustained-effort jobs points up the importance of worker stamina. Likewise, the many messenger jobs emphasize the importance of in-city travel competence and social responsibility. Dishwashing, which in most cases deals with a single kind of activity on a fairly standard type of industrial machine, accounts for over one-fifth of the jobs. The relatively small number of jobs which require a significant amount of academic skill is, of course, partly a reflection of the kind of entry job sought on behalf of retarded students. Nevertheless, it does also indicate that lack of academic skill is not a categorical barrier to employment.

Temporary job stations were used for brief, on-the-job evaluations. Many of them involved fill-in or overload work. Table 19 lists paid positions used for this purpose during the final year of the project.

Table 19

Temporary Competitive Employment Stations (1-10 days) Used for Evaluation

Positions	Number of Placements
Mailroom	34
Bus-girl	13
Bus-boy	11
Dishwasher	10
Pots and pans	9
Domestic	8
Handyman	5
Trucker's helper	4
Driver	3
Pinsetter	1
	98

Reasons for leaving jobs. Of the 184 job placements reported in Table 18, 46 are presently still filled by the same students. The other 138 job placements were eventually terminated. The reasons for these terminations are given in Table 20.

Table 20

Reasons for Job Terminations

Inadequate or handicapping attitude and motivation pattern	77
Inability to handle the job duties and instructions	30
Upgrade, went to a better job	14
Lay-off due to reduction in work force	8
Injury or illness	3
Return to school	2
Incarceration	2
Pregnancy	1
Left the city	1
	138

Factors related to attitude and work readiness cause, by far, the largest number of terminations. An identical finding emerged in an earlier study by the project ("Worker Traits and Job Terminations," November 1963). Over half of the attitude-related terminations were precipitated by specific acts on the part of the student: failure to show up for work without notifying the employer, quitting to look for another job, being absent without legitimate excuse, reporting non-existent sickness. The remaining cases of termination related to attitude did not show a specific set of acts. Rather, the students' general behavior and speech showed inadequate motivation or attention to the job. Some of the students plainly told the employer "I don't care to work." Others were flippant or resistant when instructed or corrected. Poor social judgment sometimes compounded the situation. These students gave the appearance of not trying, or of having no work desire or stamina.

Regarding the terminations due to a lack of ability, most involved a general ineptness of a kind which is not a problem in ordinary employees: confusion about travel, inability to grasp a sequence of instruction, poor retention of instructions. There were very few cases of termination because of a lack of ability that could be directly attributable to a lack of aptitude such as dexterity or mechanical comprehension.

With this kind of direct feedback from placing students on jobs, the project has worked to develop appropriate methods and techniques to aid these students in coping with their problems. It has also communicated findings on types of job opportunities and on problems encountered by students working on jobs to the special class teachers and to groups working on curriculum development.

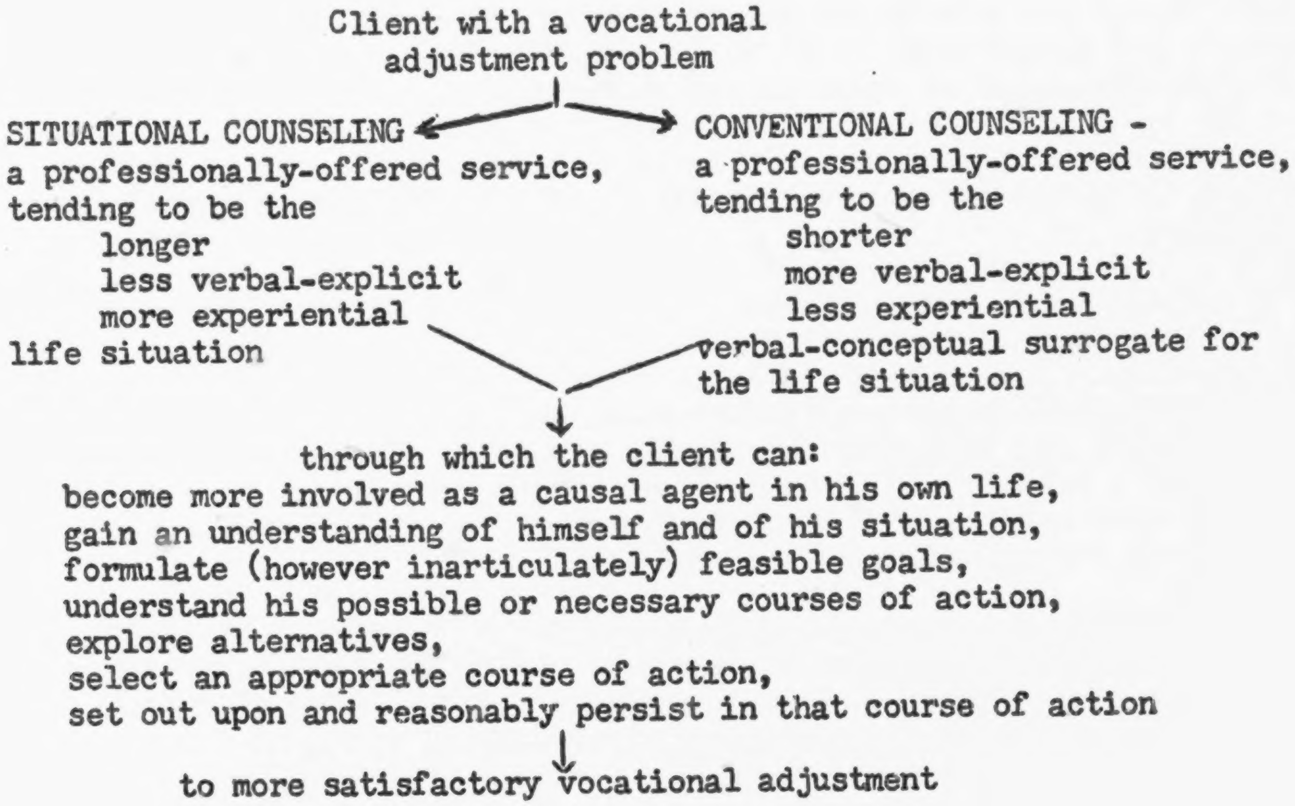
Counseling Services

Conventional vocational counseling was provided, utilizing testing and assessment, interview and interpretation aimed at helping the student see his opportunities and move toward realistic goals. Placing a student in an actual situation in which he could test reality also became part of the counseling process. Free feedback of reaction from peers and staff was encouraged. Thus, counseling services of the project involved both verbal and situational counseling, with the latter adding the utilization of direct experience, group interaction and environmental manipulation.

"Situational counseling" is a term which came to be used by the project staff in order to denote the body of methods which was used for student guidance and which, though based upon the usual formulations of counseling theory, was deliberately more experiential than verbal-conceptual. Rather than focusing the counseling activity upon an across-the-desk, verbal interaction, the project used the total situation and staff as the broad counseling tool. Since situational counseling was such a vital part of our program, and since it may appear to be somewhat self-contradictory, the following discussion is offered as an outline of the concept in relation to conventional counseling. Out of this discussion of situational counseling as it was used in the project will come the rationale for the "case manager" position which was developed in the later stages of the project.

Figure 5

Outline of Situational and Conventional Counseling



Client with a vocational
adjustment problem

SITUATIONAL COUNSELING
a professionally-offered service,
tending to be the
longer
less verbal-explicit
more experiential
life situation

CONVENTIONAL COUNSELING -
a professionally-offered service,
tending to be the
shorter
more verbal-explicit
less experiential
verbal-conceptual surrogate for
the life situation

through which the client can:
become more involved as a causal agent in his own life,
gain an understanding of himself and of his situation,
formulate (however inarticulately) feasible goals,
understand his possible or necessary courses of action,
explore alternatives,
select an appropriate course of action,
set out upon and reasonably persist in that course of action

to more satisfactory vocational adjustment

Before considering this outline in detail, the reasons for our use of situational counseling must be explained.

First was the counseling heritage which the project derived from its vocational rehabilitation and education antecedents. The language and methods of counseling were, in their essence, considered to be appropriate to the project's purposes. It was not necessary to challenge the essentials of counseling.

Second, and this is the point which necessitated some modification of conventional counseling, the verbal-conceptual avenue of communication and reality-symbolization was recognized to be inadequate for exclusive use with this population. It was necessary to challenge some conventional counseling methods.

Counseling practice is usually dependent upon abstraction, the formation and manipulation of concepts, and the extensive verbalization of facts and feelings. Conventional counseling deals in the surrogates of reality, rather than in the direct experience of reality itself. There are many advantages to this abstract verbalization. The verbal-symbolic exploration of a vocational choice is cheaper, faster, and easier than is actually preparing for and embarking upon a variety of careers. Fortunately, verbal-symbolic exploration can be carried out by most counselees. Unfortunately, it calls for normal verbal facility and abstract reasoning power. It also assumes a one-to-one relationship between talking about and doing, and takes for granted a substantial multi-potentiality in the client and his situation. The population served by Project 681 was handicapped in terms of those very requirements and assumptions.

The project thus had to either abandon counseling as a technique, or fall back to the essentials of counseling theory which underlie the conventional method. The second alternative was chosen. Consequently, the usual verbal counseling was established as one aspect of the broader situational counseling. Both were related to the same counseling theory (methods and aims) as shown in the above outline. The outline bifurcates on the level of methods, but indicates that conventional counseling and situational counseling are unitary as to aims. Both agree as to what the client is to get out of the counseling. They differ as to verbal abstraction of method.

Situational counseling is not offered as an alternative to conventional counseling, but as an extension, out of the office, of the counselor's normal role. The hallmark of situational counseling is that the counselor uses the applied situation (staff roles, work samples, job try-outs, group assignments, and so forth) as a counseling tool. To do this, the counselor must have a relationship with the rest of the project staff which enables him to make case management prescriptions - that is, which enables him to manipulate the student's in-project situation.

To illustrate another direction in which conventional counseling had to be modified for use with the project clientele, a recent formulation of rehabilitation counseling procedure may be cited. Lofquist, Siess, Dawis, England, and Weiss (1964) developed a formulation within the conceptual framework of their theory of work adjustment. This formulation, like others in the field of rehabilitation, appears oriented to clients with an acquired, circumscribed medical handicap in an otherwise intact person. It serves as an illustration of established rehabilitation counseling theory in general. This formulation goes further than many previous ones in recognizing the frequency of limited opportunity for reality testing among the rehabilitation clientele since it frankly assumes an expert-adviser rather than a completely nondirective role for the counselor.

The counseling method presented by Lofquist et al (p 12-66) is outlined in ten steps. Step 3 ("Constructs a model of the pre-trauma personality) and the stress upon medical diagnosis and treatment of the disability may both be discounted when dealing with the majority of the mentally retarded, among whom there is no pre-trauma period and in which the primary disability is psycho-social-educational. More serious difficulty arises when Step 1 requires information on the counselee's expectations of the counseling (most clients of the project were passive at entry), Step 2 requires early client participation in data gathering, and Steps 5 and 6 specify psychometric evaluation of status and progress. Step 8, in which the Occupational Ability Patterns are matched against lists of Occupational Reinforcement Patterns, assumes a much less restricted set of life action possibilities than is faced by the usual retarded person, and also assumes an index validity which breaks down when one counsels with the retarded.

The inadequacies of conventional counseling can be recapitulated as: in a retarded population the disability is fairly general rather than circumscribed, the opportunities are sharply limited, psychometric and other abstract indices are unstable, and most clients fail to meet any of the Occupational Ability Patterns as normally defined.

The last two problems, of which one is a special case of the other, are not widely recognized. IQ instability is described elsewhere in this report. The comparative invalidity of the standard psychometric evaluation of interests, needs, personality, and aptitudes was established early in the life of Project 681. In terms of the usual predictive indices, most of the project clientele fail to "qualify" for the jobs on which they were placed and in which they succeeded.

The above is not intended as a criticism of rehabilitation counseling theorists. It is intended to indicate the areas in which Project 681 had to modify counseling practice. Counseling theory could be used in its essence and aims, but its usual formulations could not be taken literally. The project staff had the insistent impression that most counseling theorists had had little personal experience with the kind of client seen in the project. In effect, the project staff had to re-formulate counseling theory and express it in the situational extension of the counselor's role into the program of the project.

The counselor's role extension into situational counseling was stated above to require case management prescriptions. That is, the counselor needed to have a certain amount of control over the situation in order for him to use it as a counseling tool. Some such control is common in facilities where a counselor works in a multidisciplinary team, and is usually carried out informally. The experience of Project 681 seemed to indicate that a more formal control was needed because of the explicit use of situational counseling. Originally, the entire team of Project 681 carried the counseling responsibility. When the counseling function came (through staff additions and specialization) to be located in a particular staff position, that position emerged as a case manager rather than as a conventional counselor.

In a facility such as the project, many staff man-hours are invested in each student. The staff roles are diverse, and each contributes a special part of the diagnosis and the treatment. As the caseload increases, it becomes impractical for each staff member to be a generalist, and for each staff member to understand every aspect of the case to an effective depth. Each member of the staff becomes an expert with a specialty. Yet, the client is a single complex organism. Each facility develops the team structure which it finds appropriate to its cases and circumstances. Project 681 developed a team structure which includes specialists and a generalist, the case manager.

This one person, the case manager, is expected to deal with a limited caseload. He is expected to know each of his cases in considerable depth, and to be the central repository of information about and management of the case. He is not expected to be expert as a work evaluator, or a job development coordinator, or an instructor of work-related subjects; he is expected to work closely with those specialists on the staff so as to know and deal with the significant matters in each of these specialties in relation to the students in his caseload. This system frees the specialists to carry out their functions without their having to carry the full range of diagnostic and treatment responsibility. The net result in Project 681 has been to permit an increase in the facility's caseload by adding case manager positions without increasing the number of specialist staff positions at the same rate.

Efficiency, though served, was not the only consideration in this development. The major purpose served was to enable at least one person on the staff to know each student in depth. It then seemed reasonable that the one person who knows most about the case should be responsible for managing the service to that case. To the extent that the service is individualized, the prescription of services should be made by the staff member most broadly responsible for the case. This was the rationale of the project's development of the case manager role.

During the later stages of the project, the case manager role was made explicit in a proposal for the School-Rehabilitation Center which succeeded Project 681. It seemed possible that the agency responsibility of a Division of Vocational Rehabilitation counselor could be added to the case manager's duties, and this was proposed.

The discussion here has been somewhat idealized. In practice, the role could not be developed in this abstract way. The case manager was not entirely a generalist, for one thing. Personnel availability made it most effective to use rehabilitation psychologists as case managers, and this introduced the specialty of psychology. The case manager role was not fully developed during the grant period of Project 681, but its basic structure and feasibility was demonstrated. Whether the agency responsibility of a DVR counselor could be accommodated into such a role has not yet been determined.

Follow-up Services

Policy of the project was to continue following all students referred. This was felt to be necessary for any evaluation of the project itself, but the policy also turned out to be very useful in illustrating the continuing service need of many retarded students.

Staff of the project normally came in contact with former students in many situations and places. Some former students frequently stopped in at the project seeking further aid or simply to talk. A systematic contact with all cases was made each summer. Each year this resulted in the return of some students to the project and in a significant amount of continued guidance to others.

It is, of course, naive to think that the employment and community adjustment status of sixteen to twenty-one year olds would remain stable. Many students who had left the project employed in full-time jobs were later found unemployed and not seeking work. Others, who were terminated from the project as unemployable, were later found working or more ready for work. For example, a boy who had failed in job placements and in the project preparation program after fifteen months of effort, remained home, unemployed and unoccupied for over a year. As a result of continued follow-up service he then returned to the project, was eventually placed in a competitive job and has been employed ever since.

It became obvious that continued follow-up contact in all cases was performing a very essential service function in addition to the evaluative-research function it was designed to provide. Follow-up, as it was done by the staff itself (all staff members participated in making follow-up contacts), produced direct feedback to the project's program. Students who returned to the project provided valuable comparison between initial and subsequent evaluation and, in many cases, a base for measuring the program's progress in meeting the needs of its clients.

Chapter 13

RESULTS IN TERMS OF CASES AND OUTCOMES

At the beginning of November, 1962, 179 students had received some degree of service from the project unit. By November, 1963, this number had increased to 413. Their status at that time (see Third Progress Report) was presented and two tentative results discussed. One of these results was that evaluation in the unit seemed to result in continuation or further trial of many students in school. This was considered to be of particular significance because of the referral requirement that the student be about to drop out of school. The second result was that the project's program had been able to help a majority of other students into at least temporary job experience.

By the end of the project, the total number of students served had increased to 603 and the results were further substantiated. The status of these 603 students as of November, 1964, is presented in Table 21.

Table 21

Status of 603 Project Students November, 1964

Present Status		Number of Students
Presently in project unit		34
Formerly in project unit:		
In special trade school program (after evaluation)	51	
Returned to other school program	193	
Total in school (except unit)		244
Working, competitive employment	122	
Sheltered workshop	10	
Housewife	17	
Military	5	
Total working		154
Seeking employment	32	
On waiting list for sheltered placement	9	
In prevocational training (MOS, OWS, MASR)	3	
In day care center	3	
In institution or hospital (non-penal)	4	
In penal institution	10	
Family dependent	81	
Moved - left city	14	
Deceased	2	
Unable to locate	13	
Total not working, not in school		171
Total students		603

Of the 569 students who had left the project after evaluation, 244 or 42% had been returned to school. These were the students whom the project felt were capable of benefiting further from continuance in school. These students will gradually be re-referred to the unit as they complete or are no longer able to profit from the programs in which they have been placed. Since age was one of the factors found related to a positive employment outcome, these students should be in a better position, because of added maturity, when they are next referred to the unit for transitional services.

The 325 out-of-school cases were regularly followed at least once a year, and most of them had contacts with the unit much more often. Of particular concern have been those cases (81 in Table 21) classified as family dependent. Analysis indicated these cases differed from others in the project in that there were relatively more girls, welfare support was more frequent (present in more than half of the cases), the incidence of broken families was much higher and previous work experience less. The primary characteristic appeared to be that these students did not follow through well on recommendations or plans. Many of them did not complete evaluations in the unit, and in 48 of the 81 cases, specific recommendations (such as referral to a workshop or other rehabilitation facility, to a social development or day care agency or continuation in the project unit for training) were not followed. Although these students were given or offered intensive service from the project, from Division of Vocational Rehabilitation and from community facilities, many remained unoccupied in any activity and in some cases became a menace to the community. It is ironic that these cases which end up being classified as "family dependent" appear to be dependent on the weakest family structure.

Of the 325 out-of-school cases who had been served by the project during the previous three years, 122 were working in competitive employment as of November, 1964. If the students we were unable to contact (moved, deceased, and unable-to-locate groups) are disregarded, and if students in the sheltered employment, housewife, and military groups are considered employed in the broad sense, then 52% of the project's former students can be said to be employed. Many more of those students now classified in the "Not working, not in school" group had had at least temporary job experience because of the services of the project staff. It would be unwise to consider full-time competitive employment as the only goal to be striven for, however, because for many individuals this is unrealistic. The routing of such individuals to appropriate agencies (workshop, day care centers, etc.) was also a service of the project.

No comparisons were made between the outcome of Project 681 students and those in the Basic Follow-up Study (pre-project special class students) because of the essential uncomparability of these groups. The Basic Follow-up Study concerned all special class students who had left school, either through drop out or graduation, during the three years previous to 1960. The students referred to the project were actually a sub-stratum of this kind of student. Those students who were not a problem in special class and who were considered capable of moving into employment by themselves were generally not referred to the project. To get a valid comparison group to the students in the Basic Follow-up Study it would be necessary to contact all students who left or were graduated from special classes during years the project was in existence.

An important feature of the project was the close contact maintained with former students. No cases were "closed" by the project, and many students returned to the unit several times, particularly for job support and further placement aid. A follow-up study was made each summer of all out-of-school cases. This procedure revealed the frequent change of status of individuals in this population, and underscored the unreliability of statistics based upon information gained at a single point in time. Concern was focused more upon the long-range patterns which emerged. From the most recent follow-up study done in the summer of 1964, the status of 125 students who most recently had been given direct job placement and who had left the unit employed was determined. This data is presented in Table 22.

Table 22

Present Outcome Status of 125 Students Given Direct Placement Service

Status	Number
Employed	68
Family Dependent	31
School	11
Community Service	5
Penal	4
Married	3
Moved from State	2
Unknown	1
Total	125

Results are encouraging in that half of the students were found still employed. If return to school, utilization of community resources and marriage are also considered desirable outcomes, 70% of the cases show a positive outcome.

Results of Continued Follow-up

Follow-up data were available for analysis from 1962, 1963, and 1964 follow-up studies. Results, as expected, showed a great deal of instability. Students found in regular full-time employment in one follow-up were later found unemployed, and vice versa. Classification of employment status ranged from "regular full-time work" to "not employed and not seeking work." As an example, Table 23 presents a comparison between initial and later status of 211 students on whom data were available. It should be noted that the distinction between "not employed, seeking work" and "not employed, not seeking work" was rather harshly made. Although a majority of the unemployed said they were looking for work, only those that could present actual evidence of their efforts were considered to be in the "seeking work" category.

Table 23

Comparison of Employment Status from Initial to Second Follow-up

(N=211 cases)

Initial Follow-up Status	Status One Year Later	
Regular full-time (N-59)	Regular full-time	47%
	Not employed, not seeking work	22%
	Not employed, seeking work	20%
	Regular part-time	5%
	Marginal employment	2%
	Unable to locate	2%
	Deceased	2%
Regular part-time (N=16)	Regular full-time	44%
	Unable to locate	19%
	Regular part-time	13%
	Not employed, seeking work	12%
	Not employed, not seeking work	12%
Marginal employment (N=17)	Not employed, not seeking work	29%
	Marginal employment	24%
	Regular full-time	23%
	Not employed, seeking work	18%
	Regular part-time	6%
Sheltered employment (N=13)	Sheltered employment	38%
	Regular full-time	23%
	Not employed, not seeking work	16%
	Not employed, seeking work	15%
	Regular part-time	8%
Not employed, seeking work (N=35)	Not employed, not seeking work	40%
	Not employed, seeking work	34%
	Regular full-time	14%
	Marginal employment	12%
Not employed, not seeking work (N=71)	Not employed, not seeking work	59%
	Not employed, seeking work	14%
	Marginal employment	8%
	Regular full-time	8%
	Regular part-time	4%
	Sheltered employment	3%
	Unable to locate	2%
	Deceased	2%

A great amount of change in status is apparent showing both positiv and negative movement. On the positive side there is much movement from part-time to full-time employment. There is also significant movement fro sheltered to regular employment. The most striking negative movement is from "not employed, seeking work" to "not employed, not seeking work." In the long run, however, those in regular employment tend to remain so and those unemployed tend to remain unemployed. This trend can be seen when the results of three yearly follow-ups are used as is illustrated in Table 24.

Table 24

Comparison of Employment Status over Three Yearly Follow-ups

Initial Status	Percent in Same Status Second Year	Percent in Same Status Third Year
Regular full-time (N=38)	45%	64%
Not employed, not seeking work (N=44)	54%	70%

Results from continued follow-up show the inherent problems of interpretation if only statistics from a single point in time are used. There is a clear need to be concerned rather with patterns over a period of time.

Predicting Outcome

The project gathered much specific information on its students. McBee cards were used to record and sort data. Distributions of specific items of information (such as age, grade entered special class, residence, fathers' occupations, achievement scores, IQ scores, aptitude test scores, work laboratory ratings) were available. This data was used for obtaining descriptive and objective information on the project's clientele. Data on specific tests and rating scores were used in developing and evaluating their appropriateness for use with this population. Planning possibilities for individual cases were never determined by single factors or averages of scores.

Some analysis was done of specific items of data as they related to outcome. For example, information of this type was analyzed on 303 out-of-school cases on whom an employment outcome was known. Generally those students who ended up in regular employment tended to be somewhat older, had spent more time in school, got higher behavior ratings from their teachers, got higher laboratory ratings and laboratory performance scores, and were placed more times by the project than those students who ended up unemployed or working in marginal or sheltered jobs. The marginal-sheltered group tended to have the lowest school achievement, the lowest specific test scores and the lowest ratings of traits and behavior. However, results on any single measure ranged widely throughout the outcome groups. Factors such as father's occupation and residence showed atypical patterns for the unemployed students but also for the employed students since such factors have atypical distributions for this special class population as a whole. The relationship of IQ scores to outcome status has already been discussed in Chapter 8, where it was shown that IQ was a poor predictor of employment outcome.

These findings are not surprising since the literature frequently reports that, within a retarded population, raw data are poor predictors of case outcome. For example, IQ does not predict wage earnings. Reports of this kind of finding, however, are generally concluded by the assertion that "factors other than these must be considered." Implicit in this conclusion is a faith that low order data will predict case outcome, if only the right data could be found.

A somewhat different approach was attempted by the project. It was reasoned that the search for predictive factors should consider not only the kind of data but also its ordering. In guidance, single data are seldom used to develop courses of action. Many factors are weighed against the specific situation facing the client, and this synthesis of data seems to rise above the contradictions and relative impotence of the raw data.

It seemed possible that if this data-synthesis approach was applied to the validation of assessment techniques, some predictive validity might be found. There was nothing mysterious about the approach; the synthesis was based upon what may be observed, though it took into account more data than is usually recorded. The real question was whether predictive validity could be demonstrated for higher-order predictors.

An example of construct validation. Three orders of predictive variable were investigated in the course of the Ninth Grade Study (Chapter 9).

The first and lowest-order predictive variable consisted of the conventional kinds of data: age, sex, verbal and non-verbal IQ's, differentials between the IQ's, reports of how well the student could follow instructions, estimated and measured academic achievement, ratings of behavioral traits, area of residence, formal family status, number of different addresses over a nine-year span, and absenteeism.

Based upon these and other data in the case, a set of constructs was formed about each student. These constructs are of a higher order than are the foregoing data, and included professional judgment. The constructs tallied were: native intellectual level, functional intellectual level, attitude, influence of subculture, influence of family, and social work consumption. These constructs, it will be noted, are frank but defensible opinions about how the student could be described.

A third order of predictive variable was formed. These variables, which may be referred to as "supra-constructs," were estimates of the student's potential. The three formed were: potential for academic benefit, potential for social development, and eventual employability potential. The supra-constructs are of a higher order than are the constructs. For example, the prediction of academic potential subsumes opinions about ability, motivation and attitude, and the influence of the family.

These three orders of variable (conventional data, constructs, and supra-constructs) were checked against case outcome several months after they were recorded. A substantial outcome differential was available in terms of drop out, since almost a third of the sample had dropped from school by the time of follow-up.

Each variable was dichotomized, and a four-fold chi-square calculated against outcome. Since numbers were approximately the same, and since the same 122 cases were involved, the chi-square values could be directly compared to find the predictive validity of the three orders of variable.

The average chi-square of the lowest order variables was just short of significance at the .05 level (3.38, df=1). This is consistent with the findings reported in the literature for the predictive validity of this kind of data in a restricted-range population.

The constructs, such as ability level and family influence, were found to be related to outcome with a significance beyond the .001 level (chi-square = average of 13.93, df=1). By going above the data, combining case information with professional judgment, it is evidently possible to generate statements about the student which will predict case outcome. The important point is that the effective predictors are higher-order variables than are the conventional data.

The supra-constructs, being fairly direct assertions of potential, should be expected to be the most effective predictors. This expectation was borne out by the study. The estimates of potential yielded the most significant chi-squares (average 24.47, df=1), well beyond the .001 level.

In summary, the contingencies with one kind of case outcome (dropout) indicate that the observed data are the poorest predictors, the constructs are quite a bit better, and the supra-constructs are the best predictors. The most objective data are the least useful (in raw form), and the highest-order case judgments are the most useful. The usefulness of these constructs lies in their superior predictive power, as has been shown statistically, and in the ease with which they can be translated into action in terms of what can be done in the case.

PART IV: IMPLICATIONS AND CONCLUSIONS

Chapter 14

SOME IMPLICATIONS OF THE RESULTS

The immediate result of Project 681 was a somewhat unique rehabilitation service program established as part of the operations of a public school system. The service unit of the project took direct responsibility for promoting the provision and coordination of rehabilitation services for the retarded. It was unique in that it had been developed and supported by a school system. It reflected a public education concern which went beyond traditional school programming.

Project 681 depended upon the experiences and methodological approaches that had been developed in rehabilitation. However, its sources of support did not demand that the program justify itself on purely economical grounds. It accepted and attempted to serve all cases irrespective of probable financial return for the investment made. It assumed that the service could fall under the same rationale of justification that education represents when it is considered to be a right of all people.

The philosophy of public education and the "rehabilitation principle" are not essentially in conflict. Both seek to promote maximum development of human potential. However, historically the public vocational rehabilitation agency structure has been built, sold, and re-sold on the rationale of direct financial return to the taxpayers as one reason for its existence. This has resulted, realistically, in the establishment of "feasibility criteria" in order to insure that those receiving service are the ones most able to benefit and most able to produce that return.

Mounting pressure from and concern for the residual not served under such a rationale gave added reason for the establishemt of federal support for research and demonstration projects to develop methods of serving less feasible clients. Whether and how some of the methods so developed can be incorporated into the existing Vocational Rehabilitation agency operation is a question yet to be resolved by that agency. The distinction between the needs of society and the dictates of economy is crucial as is well pointed out by Sinick in his presidential message to the members of the American Rehabilitation Counseling Association.

This chapter will discuss some of the implications involved in the provision of individual services to the retarded and implications in the continuation and development of the kind of program demonstrated through the project. (A detailed proposal for establishing a School-Rehabilitation Center which resulted from the project is summarized in Chapter 15.) The present chapter will consider briefly some possible implications for services for the retarded in general, for special education programs, for school system-Division of Vocational Rehabilitation relations, and for the many rapidly developing nation-wide programs of social action intended to draw more of society's "misfits" into the mainstream of social participation.

Implications Relating to Services for Retarded Individuals

Primary concern should be focused on the use of differential diagnosis and upon the development of program and treatment options. The technology for more adequate action-directed diagnosis is available. Case study methods which have developed over the past few decades can usually facilitate differential diagnoses to the extent of establishing some fairly sound guesses as to why a given person functions in a retarded manner and, more importantly, what can be done to improve his functional level given the forces at work.

Constructive professional leadership should continue to press for recognition that classification as "retarded" merely constitutes recognition that analytic diagnosis is needed to identify the tap-roots of dysfunction. Action-related diagnosis itself should follow the global identification which the retarded label represents. The action-diagnosis cannot be made by one professional discipline working alone, it cannot be made on the basis of IQ score alone, and when made, it cannot be considered to be a once-and-forever kind of determination. The purpose of diagnosis should be to derive differential courses of action, and these courses need to be as varied as are the reasons for the psycho-socio-educational-vocational phenomenon which we call mental retardation.

Objectively, society is affluent enough to afford this kind of diagnosis and treatment. Perhaps the professions feel they can afford only a gradual change from traditional practices because of the extreme complexity of the factors involved. But rigid maintenance of tradition in the face of contra-indicating evidence is a luxury society cannot afford.

A change which is needed at the outset is a shift from categorization by level of teachability (trainable, educable, slow learner) to educational classification according to functioning characteristics and possible courses of ameliorative action. Effort should direct to precision in specification of service needs, not disability descriptive labels. There must be recognition of the fact that to be maximally rehabilitative, individual case action may have to be simultaneously educational, medical, social, vocational and psychological. Excessive piecemealing of the elements with resulting discoordination of effect reduces the habilitative impact of the service investment.

Results from this project clearly indicate the need for coordination of community action in development of program and treatment options. Only a third of the project students who were recommended for sheltered workshop placement were able to enter a workshop because the service needed was not there to be used. Day activity and social development facilities were even less developed relative to obvious need. Undoubtedly, even more recommendations for this type of service would have been made had more facilities been available. The value of the investment in diagnosis is directly related to the degree to which its resulting recommendations can be fulfilled.

Service programs should be developed with consideration of their relationship to other service programs and with consideration of the total population spectrum needing services. Consideration needs to be given to ease of client movement among programs. For example, it should be possible for a given client to move from a school special class to a day activity center to a social development program to a sheltered workshop to a competitive job placement facility as he needs to move, without the impediments which may be introduced by dissonance in intake criteria at the different stations.

It is also significant that the project had little difficulty finding job openings and placing students on jobs. This seemed to be facilitated by the project's identification with the public schools. Problems were, rather, in the area of job adjustment and performance.

For the type of client served, placement services needed to be viewed as part of a relatively long-term, developmental adjustment and training process, not as simply procuring jobs and doing selective job placement. Experience on actual jobs had to start early in the rehabilitation process. The Vocational Rehabilitation "case status" system with status "6" symbolizing the time of being "ready for employment" proved fundamentally inappropriate to the actual management needs of these cases from the standpoint of creating work readiness.

These students required long-term supporting services and follow-up services. Outcome status could not be assumed determined by checking after thirty days on a job. Instability in early attempts at adult adjustment can be expected to be "par for the course" in a population whose disability resides in the area of being "unable to conduct themselves and their affairs with ordinary prudence."

The population served by the project has certain inherent limitations which prevent its members from fully utilizing the services available from other agencies. These students and their families often show social ineptitude which prevents them from responding appropriately to social agencies. For instance, they often do not respond to letters or keep appointments for interview or testing. An agency often interprets this to mean that there is no interest on the part of the client in service. It is assumed that a client who is not "motivated" to help himself is not likely to benefit from the investment in time and effort which the professional person must make. This may be a valid principle up to a point but it ignores the fact that the problems represented by many "hard core" cases are not just instances of "personal pain" where the only person hurt is the person himself. These people are problems to society as well as to themselves, and society's problem is left unresolved when the agent lets the case fade out on the basis that his behavior indicates lack of readiness to accept help.

The interpretation that the client's behavior indicates he is not really interested in help is not necessarily valid. Other interpretations of the dynamics leading to the behavior may be equally or more valid and leave more doors open to possible avenues of constructive social action. For instance, looking up a telephone number, calling the counselor, finding out that he's not in the office, calling again the next day, and so forth, is just not in the "response repertory" of most educable retarded young adults. What may be missing as a first order need is goal mediating learning. Once the intermediate steps are successfully negotiated, what the counseling agent operationally defines as motivation may show itself.

What may be required is more aggressive contact, closer supervision to make sure that procedures are followed through and, most important, day-by-day management of marginal and socially inept persons for a period of time until they have achieved a concept of what behavior leads to "success." The clientele served may often not be capable of making their own decisions and following through. Hence, the establishment of what may be termed "case managers" to provide these services.

Because of rapid social changes that disrupt vocational and social arrangements and cause displacement of people, one could expect that marginal people will continue to be in need of follow-up service even though they have been helped to get a job. These people are not as versatile or multi-potential as the normal population and could be expected to have much difficulty adapting to new situations.

In addition, young adults in general and educable retarded teen-agers in particular are oriented to immediate gratification and for this reason show poor social judgment. They are apt to "burn bridges" prematurely and get into unsatisfactory situations. For instance, we found youngsters who quit steady and low-paying jobs to accept higher-paying jobs that lasted only a few days. This suggests need for aggressive follow-up services of vulnerable cases through which the client would be periodically interviewed whether or not he was doing well on last contact with the agency.

Follow-up services should also be provided for those who had previously refused or rejected services offered to let them know the door to help was still open. Many of the mentally retarded and their parents naively assume that once a youngster is out of school his "failure" problems will be over. At the point of leaving high school, many parents view their children's problems simply and exclusively as inability to read. Much that is written in newspapers about the need for remedial reading for unemployed dropouts and others picked up in the Job Corps tends to reinforce this perception. It takes some time in the "school of hard knocks" before the parents and the mentally retarded young adult himself come to realize that he has a vocational problem. At a later date, many of these formerly indifferent students would be grateful for vocational rehabilitation service help and be interested in working with someone with whom they had become familiar.

The complement of services suggested above, case management and follow-up along with prevocational evaluation, work adjustment training and intensive placement, and more typically associated with a rehabilitation center than with a State Rehabilitation Office. The array of services described goes beyond what is offered even in a rehabilitation center in that the case managers are also concerned with documentation of eligibility, services and outcome. Therefore, what is needed for the vocational rehabilitation of the mentally retarded is a facility providing the combined services of a Vocational Rehabilitation Administration state agency and a vocational rehabilitation center.

The role of the case manager would differ from that of a counselor working through a state VRA agency and from a counselor in a comprehensive rehabilitation center. It would differ from the State Rehabilitation counselor's role in that the case manager would provide intensive, on-the-spot-supervision in a training facility. The case manager would be a guidance specialist and delegate many rehabilitation activities to others. Job placement, evaluation and training, coordination with schools, and so forth, are carried by other staff members in the facility. The writing of summary reports, prescription of services needed, counseling and individual testing and decisions for case action would be the kinds of specific duties which the case manager would perform.

The role of the case manager would differ from the counselor in a rehabilitation center in that he is also concerned with documentation of eligibility for Vocational Rehabilitation Administration services. The case manager could also arrange purchase of services such as sheltered workshop training. The typical counselor in a rehabilitation center is not in a position to do this.

In summary, the mentally retarded special class students were found to need more aggressive and intensive vocational rehabilitation services than that usually provided through a state vocational rehabilitation office. Therefore, a rehabilitation facility with a staff of specialists seems needed, that is, evaluators, trainers, group workers, placement coordinators. However, this should be supplemented by a case manager who carries on the combined function of a counselor in a rehabilitation center and a counselor in a state vocational rehabilitation agency in order to provide close supervision and documentation.

Implications Relating to Project 681 Program Continuation

Most retarded students are not ready for serious consideration of permanent employment until the completion of at least the equivalent of a high school education. The vast majority of non-retarded students do not successfully enter the labor force until they have completed the minimum of a high school program. It is unrealistic to expect the retarded to do so at any earlier age. Programs involving job placement of the retarded may frequently be initiated before the time of high school graduation, but they should be considered as training and preparation programs. Vocational Rehabilitation agency cases of retarded students closed as "rehabilitated" before the age of eighteen may be suspect of unstable outcome. It would be more reasonable in terms of probabilities of outcome to monitor all cases until the age of twenty-one as a minimum.

Vocational Rehabilitation agencies seek to promote school responsibility for training and preparation of the retarded. In many instances, they do this by urging schools to keep retarded students as long as possible before making referral to Vocational Rehabilitation. They often exert this pressure in principle without sufficient regard for the school's problems in the individual case. The consequence of this procedure is that the schools give the Vocational Rehabilitation counselor the list of students about to be terminated. However, the alternative of involving a vocational rehabilitation counselor in the placement of students on part-time jobs while the student is still enrolled in secondary school half days may also constitute a kind of abandonment of school responsibility. There is still a question of whether retarded students are really ready for this stage in life movement or whether there should be a school program that carries them further in the kind of learning which they may need to consolidate their grasp of fundamental adjustment-related knowledge. This may be particularly true of those clients who are retarded because of social deprivation.

A significant result of Project 681 was the gradual change in the attitudes of referring schools toward continuing to assist in the students' training. Initially, referrals were made on the assumption that the student would never again return to the referring school. Gradually more and more students were recommended to return to school programs for further experience, maturation and training after a period of evaluation and guidance in the project. In many cases it was possible to make specific recommendations for program modification back at the referring school. Schools came to accept the project as a vehicle for evaluation and planning. It is interesting that the number of referrals increased rather than decreased as a result. It seemed that the schools were actually more interested in knowing what might be done to help the student than in relieving themselves of problems.

By the end of the project, a major area of concern was how to be more effective in working directly with the teachers in the home schools. During its three and a half years of operation, project influence had resulted in the continuation of many special class students in school who, without this evaluation-guidance intervention, would have dropped out. The obvious next step was for the project to contribute more directly and usefully in the development of the school program for these students. This seemed to indicate that project staff should assume more initiative in follow-up of students returned to school programs and in consultation with the school staff. It is through this kind of interaction that new program possibilities are most likely to be developed. Curriculum guides are useful as devices for setting a frame of reference but they cannot equal in effect direct interaction around individual cases.

Continuation and development of benefits realized through the project involves at least three realms of service enablement: (1) services provided directly by the project, (2) services purchased for individual cases, and (3) services provided through coordination with other programs.

The place and value of the first area appears to have been relatively well substantiated by the project. In fact, it would be difficult to discontinue the program developed through Project 681 without community dismay. It would also be difficult to discontinue such a program within the school system without protest from the junior and senior high school staffs who have come to depend upon this resource.

The second area, purchased services, primarily involves a Vocational Rehabilitation authorization of funds for individual case services. This means is, of course, dependent upon the availability of vendable services within the community. Dependence upon this mechanism is affected by the extent to which service needs cannot be met directly within the unit.

The third area, that of coordination with other community programs, is likely to be the most productive area of future development. This may be in terms of cooperative arrangements between school systems and Vocational Rehabilitation agencies, between a school system and other school systems, or between school systems and other community agencies involved in rehabilitation work.

Implications Relating to Special Education Programs

When the agency responsible for the special education program becomes directly involved in trying to fit the product of its long-term effort into the adult social milieu for which the education was to have prepared him, it is inescapably confronted with the errors or merits of its practices. The direct involvement of the school in job training and placement helps to keep ultimate objectives in focus. One of the great dangers in education seems to be the ease with which intermediate skill and course content goals become reified as ends in themselves.

In a way, the fact that some students are retarded is evidence for the proposition that, for them, the conventional educational system has been weighed and found wanting. Basic learning principles such as those posited in the systems of Hull, Mowrer, and Skinner, are probably as adequate for use with the retarded as with the normal student because they transcend the factor of individual differences in ability to learn. Many of the vested methods of education, in contrast, are predicted upon "normal" educability. These methods need re-examination in the light of their effectiveness and appropriateness for a retarded population.

The methods of conventional education are built upon a particular hierarchy of skills. This hierarchy breaks down with the retarded, especially in the area of reading. In the later elementary and the secondary years, the acquisition of new learning and of additional skills is dependent upon reasonably fluent reading skill. Since most of the retarded read at no better than the fourth grade level by the time they reach senior high school, and since some of them have no usable reading skill, they cannot be expected to use printed material as the major learning tool. This fact is recognized by special education, but substitute learning avenues are far from being developed.

Instead of developing alternative learning methods, the tendency in special education has been to present the regular curriculum at a slower pace to smaller class groups to permit more individual attention. Books are usually selected at a reading level which approximates the child's mental age rather than his chronological age. While these minimal, relatively mechanical adjustments may have their point, they do not go far enough. The inadequacies of mental age as a guide for selecting courses of teaching action have been pointed out by Reynolds (1965). Such procedures may be effective for those retarded who function close to the normal range, though this is questionable, but they are inadequate for salvaging those children whose characteristics place them beyond the reach of "watered-down" traditional procedures.

The various industrial arts and home economics sequences are often viewed as avenues of escape from the frustrating demands of an "academic" curriculum. However, these programs too often assume a higher degree of reading skill than actually exists and assume the ability to rapidly absorb abstract scientific concepts. A re-orientation in teaching methods is needed in these areas as well as in the "academic" areas to enable them to meet the needs of retarded students more adequately.

There is substantial evidence that the retarded are capable of acquiring more non-reading-skill learning than they are found to have actually acquired. The extent to which certain children shift in IQ scores, behavior, and motivation when meaningful opportunities are made available to them (witness the impact of a paycheck) is telling evidence that some of their potentialities have been untapped during their previous educational experiences. It is thus urgently incumbent upon special education to develop learning tools which can effectively enable learning by students who have already shown that they learn poorly by conventional methods. The conventional skill hierarchy must be recognized as convenient, but not sacred.

The reliance upon the conventional skill hierarchy is only one index of the extent to which conventional education is based upon an abstract verbal-conceptual approach. The text and lecture method, which is a verbal and vicarious substitute for the direct learning experiences of life, has been a favored method in conventional education. In special education, carried out as it is by people trained first of all in general education and in classrooms with desks and workbooks, the verbal-conceptual method is sometimes modified but not often really replaced. There is a circularity in the definition of who is retarded; retarded students are those who do not learn well in conventional verbal-conceptual education, and consequently retarded people are those for whom the conventional verbal-abstract method is often inadequate. Special education has not produced a basic method which educates the retarded as effectively as the abstract verbal-conceptual method does the non-retarded. The task of achieving a methodological breakthrough is urgently incumbent upon special education.

The experiences and findings of the project document the invalidity of providing only one type of supportive help. The traditional special class may fill the need for some but not for others, and teaching objectives for one child may need to be quite different from the objectives for another. This makes curriculum writing difficult. However, under the influence of a commitment to independent living, the Minneapolis school system's special education curriculum guide is now taking a form which highlights the comprehensive, habilitative objectives of the program. Emphasis is on shaping behavior which will facilitate adjustment in the broad range of demands which being an adult and a worker imposes. In this light, skill in the management of practical life tasks and interpersonal relations assumes greater importance than knowing the rules of formal grammar or how to add, subtract and divide. Emphasis is on bringing the pupil to a stage of work-readiness by the completion of his formal school program. With this orientation, the curriculum becomes a means of promoting development in broad aspects of adjustment with the end objective being maximum self-sufficiency, not possession of a body of information to be memorized and parroted back on demand.

In summary, it is apparent that special education must move beyond the methods of conventional education if it is to meet the needs of its students. Perhaps one reason for the immutability of educational tradition is that until recently, society did not seriously intend education to be universal. A very large drop-out rate was tolerable, and those who could not profit from the conventional approach could be eliminated from school without much disturbance to themselves or to society. Now, however, a drop-out rate over 15% is cause for alarm to society, and the individuals who drop out are denied access to that majority of life which requires a high school diploma. The conventional methods of education are inappropriate to or even unusable by a growing proportion of the student body, and this ought to promote serious re-examination of education's methods. These students who are in trouble include not only those who are retarded, even by the definition used in this report. The sociologically disadvantaged are also in trouble, and in essentially the same way. Society is beginning to demand of education that it meet the needs of the students who could formerly be eliminated without challenge from the educational process on the grounds that they did not fit the conventional educational methods. Special education, being less method and system bound than regular education, may be able to help provide some of the leadership and innovation for the breakthrough needed in educational methods.

School System - Division of Vocational Rehabilitation Relations

Project 681 was a demonstration of one kind of school-Division of Vocational Rehabilitation relationship. It was intermediate between the historic operation of a DVR Branch Office in the school facility which had existed since 1935, and the envisioned School-Rehabilitation Center operation described in Chapter 15. Some implications for school-DVR relations can be drawn from the project's experience.

One implication has to do with the difference between rehabilitative results and their documentation. Project 681 placed many retarded adolescents in employment. Extensive vocational diagnostic services were provided and many of the students were also given prevocational training. The clientele were the kind which is eligible for DVR service, and they were unquestionably vocationally rehabilitated by any standards. Yet fifty of these cases did not appear as part of the Rehabilitation agency's statistics. The loss in credit was due to the fact that the traditional documentation was too cumbersome to keep pace with events and too physically separate from project activities to keep abreast of developments. This problem was not fully solved by the end of Project 681. It remained possible for a service agency to accomplish its results at such a rate that its results could not receive the documentation in advance which is inherent to the state agency's way of operating. The implication is that the documentation system must adapt so as to reflect technological progress, not that the rate of client service should be geared to the pace of documentation practices.

Another implication has to do with the physical union of the two agencies. This is akin to the foregoing discussion of documentation. A counselor who is housed in an agency which is physically separate from the agency which serves the client on a daily basis, even a counselor who is conscientious and alert, is at a disadvantage in dealing with fast-breaking case action. This obviously implies that the DVR counselor might be more effective if he were an integral part of the service agency team, bringing his skills and his official agency capabilities with him. The special education output of a large city school system can easily fill several Division of Vocational Rehabilitation caseloads.

A third implication has to do with the interchange of technological developments. When Project 681 began, it imported rehabilitation skills and outlooks into the school system. This enabled a school system to attempt and accomplish things which schools had not done before. As the project went forward, it developed a hybrid school-rehabilitation technology which surpassed both of its parents in this expanding service area. The project's technological developments then began to diffuse back to the State Rehabilitation agency as well as to the special education program. The implication of this is that fusion of efforts of this sort leads to advances in the technologies of both parent agencies. Further, demonstration of program innovations makes technological advances acceptable to social institutions which are typically highly conservative.

Implications Relating to Social Action Programs

The development of programs of social action is a matter upon which the technology of rehabilitation in general, and of Project 681 in particular, may have some bearing. In order to give meaning to that statement, some of society's emerging programs will be used to illustrate a common denominator of need and technology.

One such program is usually called something like Youth Development. The concern of these programs is with youth who are inadequate against the mixed criteria of late adolescence: school appropriateness (drop-out), social competence (delinquency), and economic competence (youth unemployment). This social action program has just begun to grapple with programs for its clientele. It is finding that the problems of a large proportion of its population are the same problems which are found in the majority of the retarded population.

As it is not true that all of the retarded are deficient in intellect, so it is not true that the Youth Development population will all be intellectually normal. Disregarding the psychometric extremes, the Youth Development population can not be distinguished from the school-identified retarded population in many cases. The reasons for being classified into one population or the other are mostly administrative, and the reasons for being classified into either population are largely common to both populations. Many of the effective treatment techniques are common to the two populations. This commonality will, in the short run, lead to the development of two separate but quite parallel social action programs having much similarity in practice and clientele. One may hope that the programs will be complementary rather than duplicative, and that the newer will profit from technological development of the older.

Another social action program which is becoming established is that of manpower development. This program has proceeded with a minimum of new conceptual development, being predicated upon a population lacking skill only, and being dependent upon screening and guidance techniques which require general normality of the client. The experience of this program has been that a good many of the applicants who most need service are not able to qualify for it, either by lacking the self direction to persist in application or (more commonly) by lacking tested evidence of training potential. In a sense, these are people who are retarded against the adult criteria of competence, whether or not they were retarded against the educational criterion. The large sub-group of the manpower development population who remain unrehabilitated contains a significant number of people who are inadequate in general economic adaptive ability, and whose problem is something other than the lack of a specific job skill. Their needs, and the effective treatment of their needs, may conform closely to a rehabilitation pattern which best serves the retarded.

A final social action program is the emerging war on poverty. Some conceptual development has taken place in this program, in that reference is often made to the co-use of existing programs. It is at this writing too early to forecast the course of the war's future. There is recognition of the overlap of some of the war's target population with the populations of other social action programs, such as those of Vocational Rehabilitation and of programs for the retarded. This recognition is stated in terms of there being a large number of rehabilitation agency clients among the war's target population. There is, as yet, little recognition of the commonality of the populations' "real problems in the case," in contrast to the administrative categorization of the person into the caseload of one or another agency. The recognition of the appropriateness of rehabilitation techniques, many of them developed for use of the retarded, is growing. Here also one may hope that tooling up may be aided by the recognition of common problems and techniques.

The technology of rehabilitation, especially that part which arises from work with people who have general handicaps such as retardation, does have useful contributions to offer other social action programs. The programs discussed above are programs of rehabilitation, regardless of eligibility label and without regard to the formal title of the agency.

Soon (perhaps in a decade; cultural change is accelerating), society will be forced to realign its service agency structure Theoretically, this realignment is possible now. It is actually done on a case-by-case basis. A client comes to the attention of a social agency, and is accepted or rejected on the basis of a formal problem, such as a physical handicap or mental retardation. Once he is accepted, if the agency is flexible and alert in its diagnosis, he is treated on the basis of his individual problems and situation. The treatment basis is seldom in one-to-one correspondence to his formal problem, the one which made him eligible for service.

Thus we have a sociological complex, one aspect of which is mental retardation, one aspect of which is school drop-out, one aspect of which is delinquency, one aspect of which is vocational non-adaptation, one aspect of which is social dependency, one aspect of which is poverty, one aspect of which is the difference between physical defect and handicap. Society has traditionally dealt with each aspect as though it were a separate problem unrelated to the other aspects. Analysis of individual people in trouble seems to indicate that there is a deep-running commonality to these aspects. Saying that these people have multiple problems does not really come to grips with that commonality, and is best viewed as a temporary expedient adapted to society's traditional service structure.

What is needed is a re-structuring of society's service entities, both of agencies and professions, based upon an individual-centered re-factoring of the needs and potentials of people in trouble, people who are now multi-agency in their service needs. This re-structuring is not likely to take place as a rapid and rational process, but it is likely to take place. Some long-existing agencies, with eligibility requirements which are too narrowly defined, are already being phased out by the establishment of new agencies which take a broader and more flexible view of the needs and which will necessarily rise to the challenge of those needs.

Chapter 15

PROPOSAL FOR A SCHOOL-REHABILITATION CENTER

As a result of Project 681, a proposal for a special School-Rehabilitation Center was prepared in February, 1964. It was based upon the project's experience and findings and upon the work that had been done in curriculum planning. Since the project's conclusion, efforts have been focused on establishing this Center, and it is presently in its first stage of operation.

The purpose of the special School-Rehabilitation Center proposal was to test the feasibility of moving further in the integration of school and rehabilitation resources to maximize effective service and program development for the handicapped. Emphasis was to continue on demonstration and program evaluation research rather than on research dealing with causative or diagnostic factors in themselves. Underlying this was the feeling that there was in this area adequate evidence of the kinds of factors which caused problems for these people and that fruitful efforts could best be focused on direct attempts to alleviate these effects.

Project 681 had been able to provide services not offered before by the school to retarded students. These needed to be continued and improved. Many more students needed similar services, including a number of special education students in classifications other than retarded. Increased involvement and effectiveness of rehabilitation methods and technology was needed which would continue to result in direct feedback to the school curriculum. The school rehabilitation facility which had been founded in the project could be developed as a means of getting maximum involvement of school and Vocational Rehabilitation personnel at the same time, while yet maintaining their independent identities. Continued follow-up of cases was needed to determine effects of the program and to study such things as age factors and the effects of our rapidly changing economy.

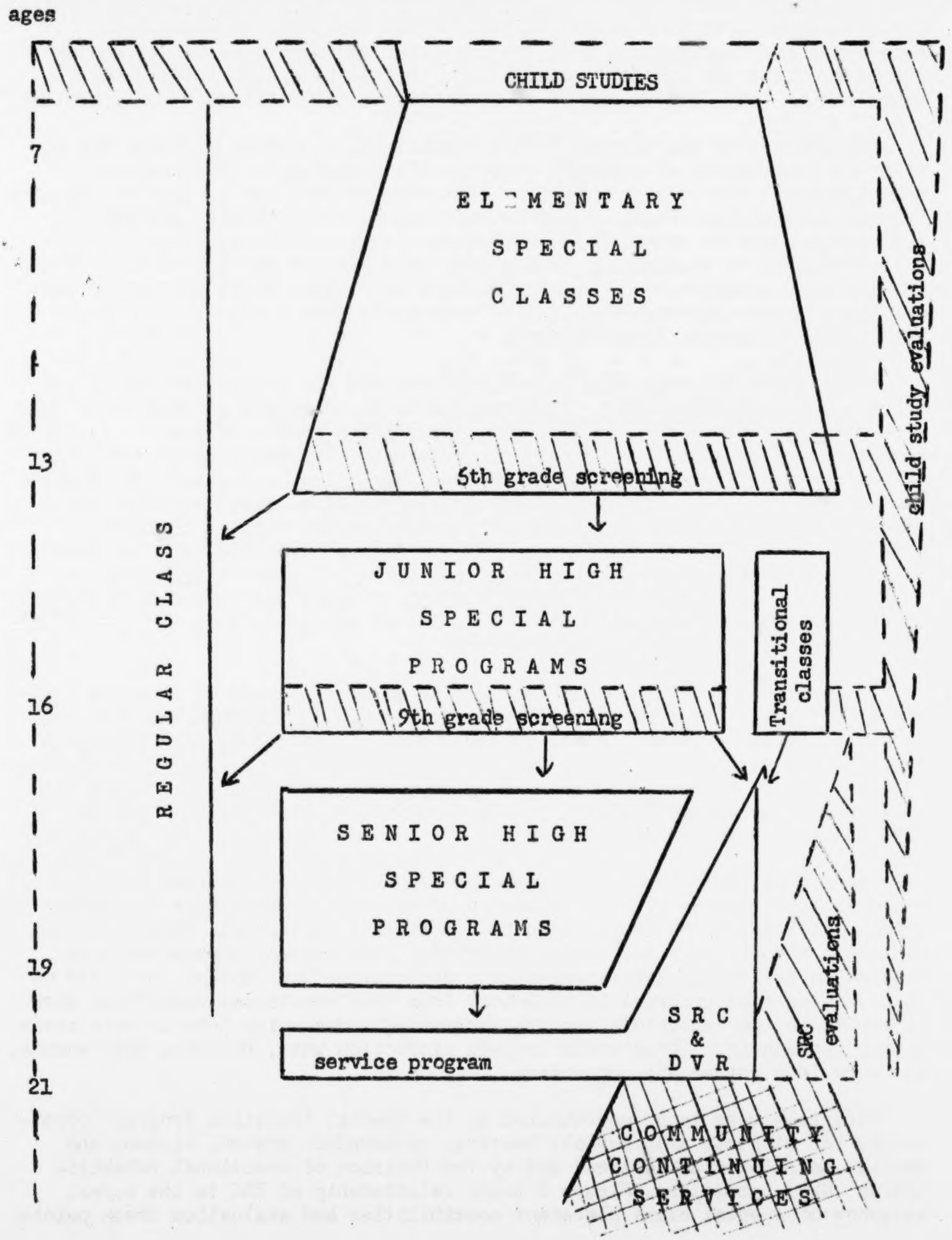
The proposal provided expansion both in terms of number of students served and in the range and quality of services offered. The project had been able to serve certain segments of the retarded student population. The proposed facility was designed to handle all retarded students in need of this service. Also, it was to be made available to other handicapped students - those with emotional, hearing, orthopedic, speech, and vision disabilities - in need of this kind of intensive service.

Another major difference between the project and the proposed School-Rehabilitation Center was the inclusion of new work areas within the Center which would closely resemble those in competitive employment. Thus a student would not need to make the abrupt transition from closely supervised work samples in the school laboratories to a competitive job. Rather, he could be moved, as he made progress in training, from this one-to-one supervised work situation in the laboratory through increasingly demanding jobs in work areas within the Center. These would include production work, building maintenance, and work in a coffee shop operation.

Referrals were to be coordinated by the Special Education Program Coordinators (of students with mental, hearing, orthopedic, speech, vision, and special learning disabilities) and by the Division of Vocational Rehabilitation (DVR) counselors. Figure 6 shows relationship of SRC to the normal sequence of special class placement possibilities and evaluation check points.

Figure 6

Special Class Placement Possibilities and Evaluation Check Points


ages
7
13
16
19
21
CHILD STUDIES
ELEMENTARY SPECIAL CLASSES
5th grade screening
REGULAR CLASS
JUNIOR HIGH SPECIAL PROGRAMS
Transitional classes
9th grade screening
SENIOR HIGH SPECIAL PROGRAMS
service program
SRC & DVR
SRC evaluations
child study evaluations
COMMUNITY CONTINUING SERVICES

Services were to include:

EVALUATION:

vocational-educational (evaluation of school achievement, work readiness and training or placement possibilities)

psychological-social (evaluation of individual and family dynamics)

TRAINING:

personal adjustment and work readiness training
situational counseling
vocational training and tryout
non-competitive work training - private work projects

PLACEMENT:

competitive jobs - job stations - on-the-job training
non-competitive placements

FOLLOW-UP

individual follow-up services
evaluative research and development functions

Students would first receive most of their evaluation and training in work laboratories. Here the emphasis was on supportive-permissive supervision on individual work samples that would not unduly strain their abilities and tolerances. As capacity for independent work increased the student would spend more time in the work areas - such as production, food and building services - that came as close as possible to actual job conditions in the community. The supervision here would be active and demanding, the atmosphere one of concern for group achievement, and the tasks those that stress teamwork and the development of cooperative work behavior.

The types of training programs to be offered at the Center included:

Food services - dishwasher, kitchen helper, bus boy, waitress, cook
Auto services - car washer, station attendant, parking lot attendant
Mechanical repair services - bicycle repairman, shoe repairman, skate sharpener
Production services - assembler, packager, laundry worker, power sewing machine operator, factory operative
Domestic services - domestic worker, child care worker
Home maintenance services - yard worker, houseman, painting, decorating and minor repairman
Building maintenance services - janitor, fireman, fourth-class engineer
Clerical services - messenger, stock clerk, cashier
Institutional services - hospital aide, nurse's aide

As a student became ready, he would be moved to a competitive job placement in the community, usually on a part-time basis with part of his schedule continuing at the Center. These placement stations would continue to function as an extension of the Center's program of training and evaluation.

Students unready to meet competitive job demands might benefit from relatively long-term preparation training in the Center. Others could profit from supervised training on work projects in their homes (see "Private Work Projects for Youth Development" in Appendix 4). Others would be channeled to workshops, day care centers and other community resources.

Experience from Project 681 had shown that many of these students voluntarily kept in touch with staff members and returned periodically for additional aid or guidance. It was proposed that former students from the Center would be contacted at least once a year until they were twenty-one. In addition, samples of former cases when they reached ages over twenty-one would be relocated and their situations evaluated.

It was estimated that the School-Rehabilitation Center would eventually have an annual "case load" of approximately 800 to 900 handicapped clients who would be in various stages of preparation for transition from school attendance to community placement. It was anticipated that space would be needed to be provided for enrollment of as many as 100 of these students at the School-Rehabilitation Center at any one time and that as many as 200 different students might be attending there for varying periods at one time or another during a year.

The possibility was also considered that other school districts in Hennepin County might wish to utilize the Center for some of their students and that the Minneapolis Youth Development Project might wish to utilize the service potential of the program for certain of its clients. This would, of course, affect the size and the development of the program, particularly the work-evaluation service aspects.

It was planned that the program would not be selecting just the "cream" (or the most feasible) for service. The long-range objective was to assume planning and placement responsibility for all cases in need of special education-rehabilitation services. This meant that the program would try to adjust service or find help for the client whose personal-social adjustment problems impeded employability. And it meant that the program would represent a fixed point of referral for a coming-and-going population and for other community agencies serving the handicapped.

Chapter 16

SUMMARY

Project 681 was initiated because of a concern for expanded development of special education and rehabilitation services for the retarded. The project was designed to explore for methods of operating which might alleviate deficiencies in traditional school-rehabilitation functioning, including: (1) the problem that conventional provision of service rested too heavily on the assumption of follow-through by the client or his parent, (2) the problem that keying rehabilitation service to the end of the high school period tended to miss the majority of the retarded because of their high drop-out rate, (3) the problem of limited rehabilitation services available through purchase, (4) the problem that many retardates needing help could not be made employable in relatively short periods of time or by one agency working alone, and (5) the problem that the community had no central reference point for all agencies to find out what had transpired with a particular retardate and what might be planned for him in the future.

The specific purposes of the project were:

1. To demonstrate and evaluate types of program and training which could be promoted or set up within a public school framework to best serve the purpose of effectively preparing adolescent retarded for employment and community responsibility.

2. To use findings of the research to gain understanding of the problems and to develop practices calculated to result in maximum benefit for the retarded.

3. To facilitate coordination of community services directed to common goals of promoting the occupational adjustment of the retarded.

4. To develop basic information and techniques for promoting the vocational adjustment of retarded students which might be put to use in rural or less populated areas.

The project ran from September, 1960 through August, 1964. During this time, it served over 500 retarded students in its demonstration unit. In addition, it located and interviewed some 400 former special class students who had left school in the three years immediately before the project began. The project also worked with over 200 other students in special studies.

The project was thus somewhat divided into service and research functions although the two were never totally separated. The primary purpose of the demonstration unit was to demonstrate effective services. Part of the research function was to evaluate these services, and part of the research function was addressed to the study of basic problems the project was designed to explore.

The staff of the project, in addition to the project director who was the consultant for the school system in special education and rehabilitation, consisted of:

A project coordinator - who supervised the program and was responsible to the project director for coordinating and carrying out both the research and the service aspects.

A unit worker - who did intake and transmitted information within the unit and who provided personal and family counseling through interviews and interpretation to parents, schools and agencies.

Two laboratory supervisors - in charge of work laboratories where they evaluated work readiness through job samples and tryouts, provided individual training, and supervised simulated work projects.

A special teacher - who worked in a classroom with group work, group testing, and the development of realistic, vocationally-related curriculum.

A work coordinator - who placed students on jobs in the community, supervised and evaluated them at work, and conducted a general job orientation and guidance session with all students in the project once a day.

Two research workers/psychologists - who did psychological studies, took part in developing and evaluating operations and procedures, and conducted evaluative and survey research.

The Research Sub-Studies of the Project

Project 681 involved a program of studies which grew out of continuing efforts to improve service provisions and which all bear upon the characteristics of the mentally retarded. Research functions of the project were begun with a comprehensive follow-up study of former students. An attempt was made to contact the entire population of the Minneapolis Public Schools' educable special class students who graduated or terminated their education from 1957 to 1960. Personal interviews were conducted with 91%, or 385, of the 423 former students (and/or parents). The interviews covered questions concerning: reasons for leaving school, work history since leaving school, present employment status, health status, and certain specific personal information.

The population comprised about two-thirds males and one-sixth non-white students. The average Binet Scale scores for the entire group was 73; the average Wechsler Full Scale score was 76. The majority of these former students were not able to read beyond the fourth-grade level. They came from economically poor backgrounds and lived in areas of the city where juvenile delinquency rates were high.

Almost half of the subjects were holding full-time jobs, or were in the armed forces, or were housewives at the time of being interviewed. However, only 23% could be rated as successful when multiple considerations such as vocational and marital stability, level of wages earned, independence and crime record were considered. Almost all of the employed were working in unskilled or semi-skilled jobs. Kitchen help, machine operators and laborers made up 73% of the jobs held by boys. Kitchen help, waitresses, machine operators and unskilled factory workers made up 92% of jobs held by girls.

Less than one-half of the subjects had been clients of the Vocational Rehabilitation agency. Of those referred to Vocational Rehabilitation, a majority had already been closed or rejected from service by the time of follow-up. Of those closed by Vocational Rehabilitation as rehabilitated, 79% were in full-time employment, in the armed forces, or were housewives. Of those rejected for service, 56% were in one of the satisfactory employment categories mentioned above.

Sixty-five percent of these students had not finished school, and many felt that they had been forced to leave school. Many wished they had had more schooling and over one-third of these students said they were making plans to get further education or training.

A second study was called "the Vocational Study." Working with the Minneapolis Vocational High School and Technical Institute, the project did systematic study of the program offered there for the retarded. This program had been in existence since 1946, and had served many of the special class students who later showed the most adequate vocational adjustment. However, in recent years, fewer and fewer special class students were able to gain entry or compete successfully in the trade offerings of Vocational High School because of the growing level of difficulty of these courses.

It was found that methods of selecting retarded students for a trade school program could be improved so that accurate prediction of survival in training would be increased. However, the rate of survival in trade school training remained so low as to render questionable the appropriateness of this kind of training for the retarded.

Studies of IQ distribution, reliabilities and relationships were made. IQ scores, as such, were de-emphasized in serving students in the project. Inter-test correlations between Binet scales and between Binet and Wechsler scales ran from .43 to .68. Using the standard classification system (IQ 80-89 dull normal, 70-79 borderline, and below 69 mentally defective), it was found that only 31% of the students kept the same classification on subsequent testing. It was concluded that IQ scores of students in this special class population were unstable and could not be used with confidence for prediction of individual potential.

The broadest population studies undertaken by Project 681 were "the Borderline Study," a study of students who functioned as retarded but who scored high psychometrically, and "the Ninth Grade Study," an analysis of the characteristics, problems, potentials, and possible courses of rehabilitation of the students in the entire 1962-63 ninth grade level special classes for the retarded (N=138).

A striking feature of this special class population was its sociological identity: of the ninth grade students, 65% lived in the sociologically deteriorated central area of the city where 27% of the city's juvenile population lived. A fourth of the students came from homes which were actively anti-school, or had relationships with the school which were destructive of the student's personal integration and which seriously interfered with school attendance or acceptance.

Two-thirds of the ninth grade group showed potential for academic benefit from the completion of senior high school, yet a third later dropped out before finishing tenth grade. Nearly 90% showed potential for social development throughout a senior high program. About 80% showed potential for competitive employment in adulthood, and three-fourths of the remainder showed potential for terminal sheltered employment.

Another study from a somewhat different viewpoint involved analysis of student and parent self-reports during project intake interviews. Interviews with students entering the project's service unit were recorded on a standardized intake interview form, and a parallel form was used to record the parent interviews. Educational history and attitudes, family-related activities, competence in travel and self-care, social competence including peer relations and delinquency, health, and work experience and plans were areas of inquiry.

In general, parents tended to be more accurate and reliable in the information they gave, but also quite often negative in talking about the students.

Both students and parents tended to be cautious about job plans, with over half of the parents stating they did not know what kind of work the student should go into. Nine out of ten parents felt the student still needed further schooling or training of some type. Equally often mentioned by the parents as something the students needed was attention, patience, and guidance from an understanding person.

The Service Program of the Demonstration Unit

The demonstration unit of the project was set up to provide an in-school facility for prevocational evaluation, planning and training. It was felt that such a service could aid education by developing better means for the schools to assess the work/training potential of the retarded, and at the same time aid rehabilitation through more effective utilization of school resources.

The unit was able to handle up to forty students at one time. They were usually divided into three groups for scheduling to a classroom and two work laboratories. One of the laboratories was concentrated in the mechanical-manipulative area and the other was focused on service-clerical work. All of the students spent time in all three rooms. Typically, at a given time, about ten students would be in the unit for initial evaluation and the others, who had been through the initial two-week evaluation period, would be continuing in the unit for work experience/training. Several other students would be out on jobs under the unit's supervision.

Students were referred to the unit when they were considered by their school counselors and teachers as ready or about to leave school. They were usually of age sixteen to twenty-one, although some younger were occasionally seen. All referrals were accepted for evaluation, thus no selection methods were used. The goal was to attempt to serve all referred.

Upon entering the unit, the student, as well as his parents, would be interviewed by the unit worker. He then moved into the initial evaluation process, which consisted of group observation and testing, tryouts in the work laboratories, psychological study, and review of school and other information. Orientation of the staff was on assessment of the student's needs rather than on whether or not he would fit into the project's established training program.

At the end of the evaluation period, a case staffing was held and was usually attended by members of other agencies also involved. Results of the observations, tests and job tryouts were presented and discussed. A free exchange of opinion was promoted. As a result, recommendations were reached such as:

Continuance in the unit for work experience/training
Return or entry into some other school program
Immediate placement
Referral to community resource

Results, with recommendations, were interpreted to the student and to the parents. The parents' reaction and direction was sought just as their help in planning had been sought at the time of initial contact.

Students who continued in the unit received an individualized program of job preparation, training and tryout placement in competitive jobs. In the work laboratories students were given individualized assignments, and areas were expanded or developed in response to the kinds of jobs availabe. At the same time, common factors such as work habits and attitudes, grooming and personal cleanliness, persistence and stamina were emphasized. Individual tutoring programs aimed at specific purposes were developed as needed by the students.

Training, in practice, overlapped guidance because the students learned more from the interpretation of their performance in actual situations than from formal test results or verbal counseling alone. Counseling was both verbal and situational through direct experience, group interactions and environmental manipulations which gave the student opportunity to test reality by working through concrete situations. Free feedback of reaction from peers and staff was encouraged. Models of reactive and supervisory action were charted which attempted to reinforce desired behavior patterns.

Almost all students who continued in the project for training were eventually placed on competitive jobs in the community for an actual work tryout. Job placement was viewed as an extention of the project's evaluation and training program. It was early and easily seen that just as evaluation could not be viewed as a once and forever determination, job placement could not be viewed as the solution to the needs of these students. A broader concept of "placement service" rather than job placement needed to be developed. Efforts were made to place students on a variety of jobs for experience, to upgrade them through a series of jobs wherever possible, and to continue to work with them over a long period of time.

Students who, after initial evaluation, were judged unready for vocational training and who were returned or entered some other school program, were expected to be re-referrals at a later time and their school progress was followed.

Students who left for immediate jobs or referral to community resources were contacted regularly to determine their status and follow-through on plans. Many of them returned voluntarily to the unit for additional evaluation or aid. It became obvious that continued follow-up contact in all cases was performing a very essential service function in addition to the evaluative-research function it was designed to provide. Follow-up, since it was done by the staff itself, produced direct feedback to the project's program. Students who returned to the project provided valuable comparison between initial and subsequent evaluation and, in many cases, a base for measuring the program's progress in meeting the needs of its clients.

By the end of the projct, 603 students had received some degree of service from the demonstration unit. In considering their status as of November, 1964, two results were discussed. One of these results was that evaluation in the unit seemed to result in continuations or further trial of many students in school. This was considered to be of particular significance because of the referral requirement that the student be about to drop out of school. The second result was that the project's program had been able to help a majority of other students into at least temporary job experience.

Of the 603 students, 34 were in the project unit in November, 1964, 244 had been returned to school and the remaining 325 were out of school. The students in school will gradually be re-referred to the unit as they complete or are no longer able to profit from the programs in which they have been placed. Since age was one of the factors found related to a positive employment outcome, these students should be in a better position to compete in the adult world, because of added maturity, when they were next referred to the unit for transitional services.

Of the 325 out-of-school cases who had been served by the project, 122 were working in competitive employment as of November, 1964. If the students we were unable to contact (left the city, deceased, and unable-to-locate groups) are disregarded, and if students in sheltered employment, housewife, and military groups are considered employed in the broad sense, then 52% of the project's former students can be said to be employed. It should be noted that this figure is higher than that for the basic follow-up group (students who left school during the three years prior to the project) even though that group contained all special class students whereas the project did not include the immediately placeable students who were not referred to the project for services. Also, the basic follow-up students were on the average two years older at the time of contact than the project students and thus would be expected to have achieved a greater degree of vocational success.

Many more of those students now classified as "not working and not in school" had had at least temporary job experience because of the services of the project staff. It would be unwise to consider full-time competitive employment as the only goal to be striven for, however, because for many individuals this is unrealistic. The routing of such individuals to appropriate agencies (workshops, day care centers, et cetera) was also a service of the project.

An important feature of the project was the close contact maintained with former students. No cases were "closed" by the project, and many students returned to the unit several times, particularly for job support and further placement aid. A follow-up study was made each summer of all out-of-school cases. This procedure revealed the frequent change of status of the individuals in this population, and underscored the instability of statistics based upon information gained at a single point in time. Concern was focused more upon the long-range patterns which emerged. If return to school and utilization of community resources are considered desirable outcomes, 70% of the cases show a positive outcome.

Some Implications

Project 681 was essentially a rehabilitation service program established as part of a public school system. It reflected the philosophy of the public school system in that it attempted to meet the needs of all its students. It differed from a state rehabilitation agency in that it did not have to so much justify its services on the basis of financial return to taxpayers and thus did not have to select those clients most able to produce that return.

The implications drawn from the experience of working with a total population of retarded youth are many and varied. In regard to the provision of services to retarded individuals, the first important element was a sound, action-related, differential diagnosis - that is, a diagnosis which made fairly valid guesses as to why a given person functioned as retarded and, more importantly, what could be done to improve his functioning. The purpose of diagnosis had to be to derive differential courses of action, and these courses needed to be as varied as are the reasons for the psycho-socio-educational-vocational phenomenon which we call mental retardation.

It is significant, and perhaps contrary to expectations, that the project had little difficulty finding jobs for its students, perhaps because of its identification with the public schools. Considerable difficulty was encountered, however, in securing placement in sheltered workshop and day activity-social development facilities because the number of students needing such services far outstripped the number of such facilities available.

For those students placed on jobs, long-term supporting services and follow-up were found necessary. Placement needed to be viewed as part of a developmental adjustment and training process, not as simply procuring jobs. The population served by the project had certain inherent limitations such as poor social judgment and lack of ability to follow-through on plans, which necessitated more aggressive contact and closer supervision than is usually offered by a vocational rehabilitation counselor.

Most retarded students are not ready for serious consideration of permanent employment until the completion of at least the equivalent of a high school education. Since the vast majority of non-retarded students do not enter the labor force until this age, it is unrealistic to expect the retarded to do so any earlier. It is thus essential to develop school programs which will hold retarded students and help them to mature relative to the broad range of demands which being an adult and a worker imposes. The project tried to facilitate this development by making specific recommendations for program modification of students as they were returned to referring schools. It is through this kind of interaction concerning individual cases that new program possibilities are most likely to be developed.

In general, however, it can be stated that special education programs must move beyond "watered-down" traditional procedures if they are to meet the needs of their students. The fact that most senior high level retarded read at no better than the fourth grade level indicates that they cannot be expected to use printed material as the major learning tool. Special education has not produced a basic method which educates the retarded as effectively as the abstract verbal-conceptual method does the non-retarded. The curriculum should become a means of promoting development in broad aspects of adjustment with the end objective being maximum self-sufficiency, not possession of information to be memorized and parroted back on demand.

The experience of projects such as Project 681 also has some bearing on the new social action programs being developed. Programs such as Youth Development and the emerging war on poverty are all concerned with people who are inadequate in general economic adaptive ability, and whose problem often is something other than the lack of a specific job skill. If eligibility requirements are too narrowly defined, those most in need of service may not qualify for it. Analysis of individual people in trouble indicates that there is a deep-running commonality to their problems which requires that agencies take a broad and flexible view of their clients' needs. The treatment of these needs may well be facilitated by use of some of the rehabilitation technology which was developed to serve people who have the general handicap of retardation.

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41. Vail, D.J. Implementing a Comprehensive Mental Health Program. Address to South Carolina State Department of Health, Charleston, October 7, 1964.

42. Wechsler, D. WISC Manual. New York: Psychological Corp., 1949.

Appendix 1

REPORTS OF PROJECT 681

Background Reports:

**Community Coordinated Effort in Vocational Training for the Retarded*, May 13, 1960, (presented at the Council on Exceptional Children convention, available in *Exceptional Children*, November, 1960, Volume 27, No. 3, pages 155-172).

**Report of Cooperative Study between Opportunity Workshop and Minneapolis Public Schools*, July, 1959, (prepared by Opportunity Workshop staff).

Progress Reports:

"*Brief Report*", April, 1963, (prepared as Federal Vocational Administration prototype publication material).

*First Progress Report, November, 1961.

*Second Progress Report, November, 1962.

Third Progress Report, November, 1963.

681 Bulletins:

681 Bulletin - Issue 1, *Programing of Students*, June 5, 1963.

681 Bulletin - Issue 2, *Criminal Behavior of Special Class Students*, September 8, 1963.

681 Bulletin - Issue 3, *Student and Parent Interviews*, February 18, 1964.

681 Bulletin - Issue 4, *Jobs and Job Terminations*, February 27, 1964.

681 Bulletin - Issue 5, *Predicting Employability*, March 10, 1964.

681 Bulletin - Issue 6, *Principles of Programing or Preparing for Classroom Presentation*, September, 1964.

Charts and Brochures:

Joint Program of Minneapolis Schools and the State Department of Education, Division of Vocational Rehabilitation, October, 1964.

Occupational Flow of the Retarded in the Minneapolis Community, Chart, October, 1962.

Project 681 - Case Service Program, March, 1964.

Summary of Results from Project 681, March, 1964.

Vocational Service Flow of the Severely Disabled and the Marginal Rehabilitation Client, October 20, 1964.

Special and Technical Reports:

*Borderline Study, June, 1963. A study of 70 retarded students with IQs over 77, comparing them to a lower ability and a regular class group.

Brief Summary, Problems and Potentials of Educable Mentally Retarded Youth, Ninth Grade Study, December 7, 1964.

Changing Concepts in Definitions of Retardation, October 6, 1964. Paper presented at AAMD Regional Conference, Omaha, Nebraska.

Conference on Prevocational Evaluation, March, 1963. Papers presented at an inter-agency conference.

Construct Validation, Ninth Grade Study, December 8, 1964.

Descriptive and Attitudinal Information Reported by Adolescent Special Class Students and Their Parents on School, Special Education Programs and Vocational Planning, November, 1963. A manual for intake interviews.

Individual Intelligence Test Scores, March, 1963. A technical report of the analysis of IQ distribution and changes in the special class population studies by the Project. The 45-item bibliography surveys the related literature.

*Post-High School Adjustment of Former Educable Mentally Handicapped Special Class Students, April, 1964. Report of a follow-up interview study of 423 former special class students.

Predicting Employability, Validation of Selected Indices, March, 1964. An analysis of the predictive validity of prevocational evaluation techniques used in the Project.

*Retardation in a Public School System: a Population Study, April, 1965. An analysis of the characteristics, problems, service needs, and potentials of adolescents who are mentally retarded against the educational criterion.

Second Conference on Prevocational Evaluation, papers presented March 24, 1965.

Worker Traits and Job Terminations, November, 1963. A summary of job placements by required traits and activities, of reasons for job terminations and their implications.

*Available on loan or in the Project office only.

Appendix 2

LIST OF SELECTED FORMS DEVELOPED BY PROJECT 681*

1. Intake Interview - Student (also serves as application for Vocational Rehabilitation)

   Intake Interview - Parent

2. Referral for Evaluation to School-Rehabilitation Program
   - Supplement by industrial arts and home economics teachers
   - Supplement by school social workers

3. Prevocational Rating Form (used by home school teachers, project evaluators)

   Work Evaluation Check List - Mechanical-Manipulative Lab

   Work Evaluation Check List - Service-Clerical Lab

4. Job Ranking Sheets, Form 1

   Job Ranking Sheets, Form 2 Females

   Job Ranking Sheets, Form 2 Males

5. Employer's Progress Report of on the Job Training

6. SRC - Time Sample Observation

7. Basic Follow-up Questionnaire

   Basic Follow-up Information Sheet

*Copies of these forms are available on request.

Appendix 3

A MODEL FOR THE TRAINING OF SPECIFIC CLIENT BEHAVIOR PATTERNS

With particular reference to individual programming in day activity and social development training.

The model on the attached chart is phrased in terms of the modification of client characteristics (training), but it can as easily be applied to daily management in a group activity setting and to evaluation of progress.

The chart is adapted from Leonard Oseas' "A Model for Establishing Therapeutic Work Conditions", in the Winter 1963 issue of the Journal of Counseling Psychology. Oseas uses a basic model from psychoanalysis, but very little modification of his charts was needed to translate them into theory-free English. Until Oseas wrote his article, the literature carried almost nothing in the way of systematic schema in the areas of prevocational (personal adjustment) training. Even this chart, with its present additions and consolidations, is not really comprehensive. However, we might safely say that a comprehensive model would include at least these traits and characteristics. This chart is thus a kind of starting place.

This model is more appropriate for use with young adults than with children, because the basic reference is to adult-appropriate behaviors. However, the child is the father of the man.

Another intended basic reference is to prevocational traits. The reason for this is that at least some of the clients of a day activity center should graduate. They should move on to some other stage of the chain of: social development → day activity → prevocational training → sheltered employment → competitive employment. This is not to say that some individuals should not legitimately stay at some stage of the chain, such as day activity, as a relatively permanent case outcome. Neither does it imply that good social development cannot largely substitute for prevocational training. But it is intended to assert that such a chain does exist in many cases, and that day activity centers have a role to play in relation to the other services of the community.

The chart is to be read in the following manner. The vertical column on the left margin gives a few of the kinds of behavior patterns which it might be desirable to develop in the client. The horizontal row of paragraphs which follow each statement of behavior pattern deal with the methods which bear upon that pattern. The intent is to relate together coherent sets of activity, supervision, emphasis, and environment.

Model for the Training of

(Chart continued on next page)

If You Want to do This To the Client	Then You Follow this Guiding Idea	And You Give this Kind Of Supervision
Make him willing to stay at tasks and activities	keep the activity and activity-related stresses well within his ability, until he learns that it isn't too difficult or irksome	supportive-permissive supervision; reassurance given freely, dependence tolerated
Tie the activity to his existing needs and behavior patterns	give opportunity for personal gratification of strong needs, some of which could otherwise be expressed in "the wrong way"	permit constructive expression of personal needs, rewarding and prohibiting selectively; requires close supervision
Develop capacity for independent function; increase self-confidence	give opportunity for ego-building activity success, particularly that which requires giving up a can't-do attitude	matter-of-fact supervision, alert to when the client is succeeding through exerting himself
Build tolerance for routine, concern for doing right	use external activity limits and behavior standards to strengthen internal controls	set limits in terms of activity regulations, correct in terms of who is in charge and who is the client
Develop activity or task comprehension and judgment	make the realities of the activity and its social setting clear and understandable to him	teaching role; clarify nature of the activity requirements; call attention to objectives and standards of performance
Develop his capacity for cooperative behavior	give opportunity for successful group participation, with emphasis on contributions to group objectives	set up atmosphere of concern for group achievement; use the group attitudes as aids to supervisory control
Release his energies in a constructive way	give him opportunity for the discharge of energies and feelings, directed at the activity or task	active, stimulating, demanding supervision; attention directed at the activity

Specific Client Behavior Patterns

And You Set the Activity Goal Emphasis Upon	And You Assign an Activity Which Is
the client's own pace and standards	minimally-demanding, non-competitive; difficulty well within the difficulty range of his present ability
dictated by the nature of the personal needs which are to be fulfilled and the behavior patterns which you wish to re-direct; assign tasks which will gratify important needs, or the performance of which is helped by the existing behavior patterns, so that these patterns can be turned to good use	
dictated by the client's readiness to cope with activity pressures; generally involves setting standards beyond what he can attain without much effort, but within his capacity at this time	
quality	characterized by compulsive, attention-demanding and fussy operations
attention to actual achievement; activity goals which are tied to real-life considerations	characterized by clearly defined operations, duties, clearly useful achievement
group goals	teamwork tasks stressing interaction and give-and-take
maximum quantity and pace	demanding high energy expenditure in lively surroundings

This kind of chart frequently raises the question of illustrations of activities which will accomplish the desired result in the client's behavior pattern. However, simple illustrations might be misleading. What is really necessary is to start by determining what is needed to be done for a specific client, and then follow down (and monitor) a treatment method which is geared to that person's learning characteristics.

Appendix 4

Private Work Projects for Youth Development - a proposal for a pilot sheltered (non-competitive) work program to be demonstrated in the Special School Rehabilitation Center pending special grant support for consumable materials and supplies.

Description of the Problem Area

For the past several years the overall unemployment rate has remained close to 6% and predictions are that this figure will rise rather than fall in the future. The figure is, however, almost totally accounted for in the lower level job areas. Here are the problems of the long-term unemployed who will never return to work again. Here are the problems of the untalented youth for whom there are no jobs. Here are the problems associated with minority groups, the "underpriviliged" and the "subcultural." These people as a group can be isolated from the rest of the population by any number of correlated criteria--where they live in the cities, the condition of their homes or of their health, the incidence of delinquency or of school dropout, the material things they do not have.

Increased concern has resulted in broad programs such as keeping youth in school, housing redevelopment and retraining of unemployed workers. Recognition has grown that effective utilization of civil rights depends on jobs and on actual economic and social possibilities. Despite the many gains, retraining benefits have been severely limited to the most capable of the unemployed. Housing projects have sometimes produced new segregation and have often produced the criticism that the recipients do not maintain or "appreciate" what's been done because "they haven't changed." Schools get dropouts to return only for many to leave again when they realize that the programs they return to have not changed either.

In actual fact, there are fewer "dropouts" now than ever before, but a general goal of many would appear to be to keep all students in school until at least the equivalent of high school graduation. It is evident, and must be widely recognized, that this would require general acceptance of a different meaning to requirements for high school completion. Most dropouts are not, at least at the time, able to profit from further traditional academic programs. A large number are not capable of technical high school training in the areas where job demands are strong. Many are not able to mature enough to move into competitive jobs through school-work programs.

During the past three years, the Minneapolis School System has been conducting (with support from the Vocational Rehabilitation Administration--RD681) a demonstration work training/experience program in special education on an intensive level. Students have been given a program totally removed from traditional academic work. Emphasis has been on rehabilitation procedures and methods. Staff has been available for intensive support and training. Placement in jobs has been prearranged. Continued guidance has been provided. A majority of students have been able to profit and move into at least temporarily productive employment. However, many have not been able to keep a job for more than a few days despite long periods of training and a series of job tryouts. They appear not ready or able to enter competitive employment at any level. Yet they are not candidates for sheltered workshops for the mentally retarded or severely disabled. They have potential to do gainful employment when they are more "mature" if they are then so motivated by that time.

Proposals for Interim Training and Preparation

Ways need to be tried to enable these people to overcome the multiple, limiting factors that they can, themselves, overcome. A simple-minded, direct approach might work and might logically fit as part of a school and community responsibility. This would involve helping them to overcome the material disadvantagement they face and in so doing reenforce values and motivations considered desirable to reward. These people live in poor housing with poor furnishings and with poor facilitation for human care and development.

These students are not ready for competitive employment. Despite an intensive program utilizing highly developed rehabilitation technology they are still not work ready. They will not accept and are not logical candidates for sheltered workshop placement. They cannot adjust to or benefit from further traditional or academic schooling. Their "number one" immediate problem, as documented by a federal survey ("Services for Families Living in Public Housing," U.S. Department of Health, Education, and Welfare, July, 1963, p. 18) is poor housekeeping skills and use of time.

These students are unoccupied. They are family dependents and ironically they are most often dependent upon the least adequate family structure. They are living in the most disadvantaged homes, and the industrial arts and home economics instruction they have received in school has had little or no direct effect on them and their situations.

The material needs are obvious--the house needs paint, the screen door is falling off, the light switch doesn't turn on the lights, there aren't enough chairs that aren't broken, the flooring is coming up, the refrigerator doesn't run, the baby's bottle is dirty, the water faucets don't turn off, the toilet is cracking in two, the doors don't close, there is no place to be alone in, nobody cares and it doesn't matter anyway.

What these students need is the direction and motivation to do something about it. They need teaching that comes out to them and their situations and which enables them to do something immediately meaningful and rewarding.

It is proposed that such a program be initiated as a pilot, demonstration project. Students would, with direction and guidance from the case managers, make applications for specific work projects they would like to carry out. Parent approval and financial eligibility establishment would be necessary. Applications would be evaluated and approved if feasible.

They would then be assigned to one of the lab supervisors for implementation. He would work out detailed plans with the student and submit materials requirements. With final approval, these would then be provided to carry out the project. The lab supervisor would instruct and supervise it on a step-to-step basis.

Each lab supervisor would eventually be responsible for a maximum of fifteen of these type projects being carried out in the homes of students. Each supervisor would be freed for a portion of time to make the rounds of these projects for inspection, instruction and specific direction of the work.

Implications

There is no question of the validity of the results of this type of program if properly carried out. There would, first of all, be the direct material results to the student and his family. The student would have a tangible result which he himself created and growing confidence in his own abilities for useful accomplishments. The school would be extending its training program to a really effective level helping the student incorporate worthwhile values through his own achievements. Competitive labor would be unaffected since these people would not be part of the market for competitive services. The purpose of the training program would be to teach useful skills and incorporate values of self-accomplishment, not to produce skilled home builders or repairmen.

Additional return may also result. No matter how much is done in the school or rehabilitation facility towards work orientation, the student returns home every evening. The physical surroundings and the family influences are a stark contradiction to what was "learned" in prevocational training. In a sense, the home has been a negative conditioning factor toward positive work orientation given in school. The impact of the home is unfortunately often greater than can be ameliorated by outside influences because of the student's identification, because of long-standing conditioning and a host of other factors. The physical condition of the living quarters of the student's family in itself may be a secondary reinforcement supporting feelings of apathy and cynicism.

The program here suggested may alter both the physical condition of the home and the family's attitude toward work. The program is seen as needing close supervision of the students' projects in the home. The personnel doing the supervision will have frequent contact with the family. This contact could have a greater impact on the family than a school social worker would have because the purposes would be more acceptable, concrete and meaningful to the family. Very often when a person under psychiatric treatment starts to change, the patient's family consciously and unconsciously resists this change. When a person's attitudes change, the family is thrown into uncertainty as how to relate to him and may be afraid that the person will develop unacceptable behavior and attitudes. In this proposed program it is hoped that the student would change in attitude and behavior. Therefore, family resistance might be expected. It is thus possible that the program could have some effect in changing the family as well as the student.

Essentially there is involved in this operation a new concept of sheltered employment which could involve a built-in componet of individual attainment and self-satisfaction. Both this group of students and sheltered workshop employees are "gainfully" employed somewhere below the level of competitive work. But while workshop employees are engaged in relatively meaningless (to them) production activity, these students are doing jobs quite meaningful to them in terms of direct results.

The essential point and value we are trying to teach is that they can do something about their situations.